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# THE AMERICAN FARMER,



## SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY.

"O FORTUNATOS NIMIUM SUA SI BONA NORINT  
"AGRICOLAS." Virg.

Vol. II.

BALTIMORE, OCTOBER, 1846.

No. 4

### WORK FOR OCTOBER.

It is now eleven years since we first suggested the propriety of sowing wheat earlier, and we have periodically continued, from that time, to impress upon the minds of wheat growers the advantages which, in our opinion, would result from such procedure. It is, therefore, a source of gratification to us to be informed that the old prejudice in favor of late sowing is fast giving way, and the more scientific and rational view adopted, of getting in the wheat-crop sufficiently early, to enable the plants so far to elaborate their series of roots as to be clothed with the power of resisting, to a great extent, the effects of frost and thaws. That the wheat crop, in the aggregate, has heretofore been impaired fully one-third by what is technically called, winter-killing, must be admitted, and we entertain not the slightest doubt, that, by timely sowing, say between the 10th and 25th of September, much of this injury may be prevented. The Hessian fly is, we acknowledge, a most destructive foe. We are aware too, that its autumnal attacks are sometimes ruinous, but the danger to be apprehended from such assaults may be greatly mitigated, by the selection of such varieties of seed-wheat as are known to be constitutionally hardy, vigorous of growth, and to possess that most desirable faculty, of maturing early. While the first of these qualities guaranty exemption from injury by intense cold, the second offers a pretty sure safeguard against the autumnal ravages of the fly, and the third in a great measure, offers security against the rust.

If it should be asked, why we talk of completing the sowing of wheat in September, now that that month has passed? to such inquiries we would reply, because we desire, in advance of another year, to impress the propriety of the practice upon the agricultural mind. On the advantages to result from early sowing we desire to make a few additional remarks.

All the convictions of our mind, after taking the most comprehensive view of the question of which it is susceptible, force us to the conclusion, that the earlier wheat may be sown after the opening of September, the better chance there is for it to be advanced to the maturation of its grain, undespoiled of its products by those various insectiferous enemies which assail it, as also for it to escape from the blighting influences of the atmosphere in winter, early spring, and mid-summer. By early sowing, the wheat plant is secured in these advantages. It germinates at a period when the sun has still a potent power to impart vigor to its growth, thereby enabling it to elaborate and implant its roots in the earth, so as to defy the malign effects of those sudden transitions from the freezing to the thawing points of the thermometer, which, in their deleterious consequences, make such inroads upon the stand of the wheat field, and so often put at fault the fond anticipations and best grounded hopes of profits.

To those engaged in the business, who may have examined the subject properly, it must be obvious, that wheat-growing, at present prices, can only be rendered a source of profit by greatly increasing the product of the acre. To do this, the ground must be good, have those nutritive manures and mineral salts, which are essential to the healthful growth and fructification of the wheat-berry—that the ground must be truthfully and deeply ploughed, thoroughly reduced, by frequent rolling, dragging, and harrowing, to a silk-like tilth—and that good seed, of an early maturing, and hardy variety of wheat, must be sown.

Having thus succinctly laid down our premises, with regard to the essentials of successful wheat-growing, we will proceed to state some of the numerous objects which should claim the agricultor's immediate attention

### ON THE FARM.

*Wheat.*—Those who have not seeded their wheat, should push ahead and get it in as speedily as possi-

ble. Should any have delayed ploughing their lands intended for this crop, and have that work yet to perform, we would admonish them to be careful, and see that their ploughmen do their work thoroughly—that they plough deep, invert the sod well, and harrow and roll until the soil shall have been reduced to a complete state of pulverization.

*Preparation of the Seed.*—To ensure your next year's crop against the *Smut*, you should wash your seed wheat in pure water, until it ceases to be discolored, taking care to skim off all the light grains which may float on the surface, and cast them to the pigs. Then *Soak* the seed in salt and water, made sufficiently strong to float an egg, for 12 hours. As the seed is about being sown, drain off the brine, and dry the wheat in slacked lime, or ashes. No more wheat should be taken out of the brine daily than can be sown the same day, and the seed when cast upon the earth should be covered as speedily as possible.

*Quantity of Seed per acre.*—That thin sowing inevitably leads to light products we have never entertained any doubt. It is consonant with common sense and reason, that if we do not give to the earth a sufficient quantity of seed to fill it with wheat-plants, that nature will cover the unoccupied spots with weeds. To prevent this, should be the object of all, and, therefore, no one should sow less than 2 bushels to the acre.

*Management of the Soil after Sowing.*—Let the ground be nicely harrowed, and then rolled twice with a heavy roller, in order that the soil may be pressed around the seed, and thus secure early germination, a thing most desirable to be effected. By this compression of the earth, moisture is the more certainly retained, at a time when it is most wanted.

*Top-dressing.*—Where it is possible to do so, the best results would spring from giving to the wheat field a top-dressing composed of 5 bushels oyster shell lime, 5 of Ashes, and 1 of Salt, which would be the more effective by being suffered to remain in pile some days before being used. We prefer Oyster shell lime, because in that we have the phosphate of lime, a substance not to be found in stone lime, but most essential to the success of the wheat-plant.

*Rye.*—If there be any who may not have sown their Rye, we would advise them not to do so at this late period, but to substitute *Barley* for it next spring. If, however, they should be disinclined to take our advice, and should determine still to put in a Rye crop, our opinion is, that they should not sow until late in November, so late as that the seed would not come up until next spring. Should they thus delay sowing, it will be necessary to sow a bushel and a half of seed to the acre, and to plough it in about three inches, then harrow and roll.

*Fodder and Tops.*—If there be any who have their fodder and tops still unpulled and cut, they should go to work at once and have them gathered. When

sufficiently dry, they should be carefully stowed away, layer and layer about, with straw. By this process of slacking, the latter will have imparted to it the delightful fragrance of the former, and will be thereby rendered infinitely more acceptable to stock of all kinds.

*Manure.*—As manure is the gold-mine of the agriculturist, so should it be the duty of every one to lay the ground work of a supply at this season of the year. Therefore, so soon as the leaves fall, send your carts and wagons to the woods and gather as many loads of leaves and mould as will enable you to cover your cattle yards twelve inches deep. In the arrangement of the yards, so spread these substances, as to cause a dish-like inclination to the centre, in order that there be no loss from washing away. To prevent any loss from the evaporation of the liquid voidings of your cattle, sprinkle your yards occasionally with plaster or charcoal. When your cattle yards shall have been furnished with the requisite quantity of leaves and mould, see that your hog-pens are also similarly treated. Without periodical supplies of manure are given to the land, the best soils will wear out; hence it is, that it should be considered by every agriculturist as his first duty, to secure it in ample quantities. Let this fact be impressed upon each, that the sooner leaves are gathered, and disposed of in the cattle yards and hog pens, after they fall, the larger quantity of mineral will be secure for his crops.

*Fattening of Hogs.*—It is an admitted fact, that all animals take on fat better when the weather is moderately warm, than when cold. The philosophy of this is simply this—if the weather be intensely cold, a large portion of the food goes to keep up the animal heat, which under a more auspicious temperature, would go to the increase of flesh and fat. Therefore, as soon as your pumpkins or roots are ready, pen up your hogs, and commence feeding them, in order that they may be in a condition to kill before the weather becomes intensely cold. When the hogs are first put up, they should each receive portions of flour of sulphur, say a teaspoonful each, per day, for three or four successive days. This will cool their systems, prevent a determination of blood to the brain, cleanse the bowels and prepare them to go through the fattening process healthfully. Give them salt twice a week: keep charcoal and rotten wood constantly in their pen, which should be provided with a rubbing frost. After you may have fed them a week or two with pumpkins and roots, and commenced feeding with grain, we desire you to bear this fact in your mind—*by grinding your corn you may save one-third in quantity*—and have the cobs for your *milk coes*, the which, when broken and boiled, makes an excellent food for such animals.

*Milk Coes.*—As your pastures are now bare, provide your milk-cows with proper quantities of wholesome and nutritious food. Yard them at night, taking care to give them plenty to eat. Salt

them twice a week, and occasionally give them a mixture of equal quantities of lime and salt to lick.

**Cattle and Cattle Yards.**—See that your cattle are provided with sheds, that they lay dry, warm and comfortable through the winter, and that the manure which they may make whether solid or liquid, be not suffered to run to waste. By dishing your yards, you will prevent loss from washing, while by strewing charcoal or plaster over them, you may prevent loss from the flying off of the ammonia, in which substance the urine of Cattle is very rich.

**Horses.**—Let it be a matter of duty with you to visit your stables daily, see that they are kept clean, that your horses' stalls are daily cleansed, that ample beds of straw are provided, and that the horses, at each meal, actually receive their allowance of food. In these matters, no good master should confide in his slave. If he do, he may rest assured they will be attended to but indifferently well, and that some neighboring grog shop will be likely to get portions of the oats and corn allotted to the horses. Vigilance in the master makes a fellow who is prone to finding, abandon that propensity.

**Working Cattle.**—These must receive additional care, more food, and be provided with dry lodging under cover.

By chopping the corn, oats, rye and barley, for your horses, and mixing it with cut straw or hay, you may save fully one-third the quantity of grain you usually give them, while they will thrive better, and be kept in more uniform good health.

**Young Stock of all kinds.**—These should receive additional attention. Be sure not to let them remain out until they fall off in flesh. Yard, and protect them by sheds, as soon as the weather gets cold—give them plenty of good hay or fodder: see that they are salted and watered.

**Orchards.**—Examine every tree in your orchard, cut off every limb which is actually dead; smooth off the wound and cover it with a plaster made of equal parts of cow-dung and clay. Then make a mixture in the proportion of 1 gallon of soft soap, to 1 lb. of flour of sulphur, and 1 pint of salt. With this paint each tree from the root, up the body as far as you can reach. If any of the trees have moss on them, let that be scraped off before you apply the mixture.

Should you design planting out a young orchard this season, be sure to prepare your ground well, at once. No young orchard, in our opinion, should be set out unless the ground be previously ploughed and subsoiled; nor should it be omitted to be moderately manured broadcast. The best manure to put into the holes, would probably be mould and leaves from the forest. The time for transplanting is just after the leaves fall. The holes for the reception of the young trees should be made sufficiently wide to allow of the lateral roots being spread out without in the least being cramped. As to the depth, that must be regulated so as to allow of some five or six inches of

the compost being at the bottom, and the young tree to stand about an inch lower than it originally grew. As the earth is thrown in around it, it must be stamped tight, and would be the better of having water poured on it. Before the earth is put in, a stake must be placed in the hole, to which the young tree must be tied with a with of straw or hay, to prevent injury from the shaking of the winds.

To prevent field-mice and rabbits from barking young trees through the winter, their bodies should be treated as advised for the older ones above.

**Sheep.**—No agricultor should attempt to keep sheep, unless he provide shedding for them. To prosper, and be profitable they must be kept dry, have good bedding and be regularly fed and salted.

**Buckwheat.**—So soon as the heads of this grain shall have about half ripened cut it. When dry enough thresh it out, and save the straw, first, because it makes good provender, and secondly, because it should be a duty with every cultivator of the earth, to waste nothing which can be turned to profitable account, or converted into the food of stock.

**Out-buildings of all kinds.**—Let every one of such buildings on your farm be thoroughly cleansed, and then whitewashed inside and out.

**Fences.**—Examine your corn-field fences, and have them thoroughly repaired, so that your cattle be not tempted by short-commons, to look for weak points and break in.

**Corn Stalks.**—If these be cut up and stowed away so soon as your corn is gathered, they will, by being cut into inch pieces and steamed, make excellent food for young cattle.

**Roots of all kinds.**—Let these be dug and put away before they receive injury from the frosts.

**Pumpkins.**—These should be gathered and placed in some dry place before the frost sets in. In feeding them out, recollect, that by cooking them, you increase their value as food, whether for swine or cattle.

**Fall Ploughing.**—If you have any stiff ground that you intend for a spring crop, fall plough it. If you have a field infested with gartie, give it an early ploughing, just deep enough to turn up the roots, to be killed by the sun. The seed which you turn under will promptly vegetate. When the plants are an inch or two high, plough again, and leave the frost to do the killing.

We have endeavored to bring before you such matters as should claim your attention, and must rely upon your supplying any deficiency in our *Memo-randa*. But before we close, we may be permitted to invoke you, to look to your manure pile as the true source of wealth—*increase that, and you cannot fail to increase your temporal comforts: suffer nothing that is susceptible of being converted into the food of plants to be wasted, but have all things of the kind made into a compost.* Having thus directed your attention to a most important part of your duty, we will conclude by indulging the hope, that health, prosperity and happiness may abound with you and all in and around your homestead.

## TURNING IN GREEN CROPS FOR MANURE.

We have repeatedly called the attention of our readers to the importance of turning in green crops as a means of restoring worn-out soils to a condition of comparative fertility. In thus pressing this subject upon their notice, we were influenced by motives which appeared to us to sanction our action in the premises. We knew from experience how difficult and costly it was to procure the manure requisite to impart fertility to a poor field of even moderate size—and we had witnessed with emotions of regret, the almost universal prevalence of a feeling of indisposition on the part of land holders, to use any extra exertions in the accumulation of available materials for making manure. In most cases, judging from the surrounding facts, farmers appear to consider such labor as costing more than it comes to—and often when their more sagacious neighbors were advancing the opinion that the making of manure should be regarded as the first object of their calling, we have heard the stereotyped excuse for non-exertion given—"I have not got time"—an excuse by the bye which has nothing to justify it, as it must be evident to all intelligent minds, who may be conversant with agriculture, that all the time given to such objects is conducive to the economy of time, as nothing can be more susceptible of proof than this proposition—that every acre of soil which may be brought up from a state of exhaustion to one of fertility, lessens the cost of cultivation fully 100 per cent. A single remark will illustrate this. By this change of condition, one acre is made to produce as much as two, and to that extent is the labor and expense of culture reduced, and time consequently saved.

We have made these remarks with the view of introducing to our readers the celebrated letter of Mr. Keely detailing his memorable experiment on the Haverhill Rye-field, as communicated to the Trustees of the Agricultural Society of Essex Co., Mass. an experiment, which professor Jackson says should "be engraved on the thresholds and lintels of every farm house in the country."

Without further observation we shall introduce to the reader's notice the letter in question, and content ourselves with asking for it an attentive perusal; confident that the practical results which so beautifully flowed from the labors of Mr. K. will stimulate others to follow his excellent example:

## ON THE CULTIVATION OF RYE.—John Keely's Statement.

TO THE TRUSTEES OF THE ESSEX AGRICULTURAL ASSOCIATION:

Gentlemen.—Having for some years past been more than commonly successful in raising large crops of winter rye by a process of cultivation which I believe is entirely new; and I have been induced by the suggestion of some gentlemen whose judgment I very much respect, to submit for your consideration a statement of the mode of culture with the produce. And that the success of the experiment this season, may not appear to be altogether accidental, it will

perhaps be as well to communicate the result of the process for the three or four previous years.

The land on which the experiment has been conducted is situated on the Merrimack, about a mile and a half east of Haverhill bridge; and came into possession of my father in 1827. The soil is a sand, approaching to loam as it recedes from the river. Perhaps the term *plain land* (by which it usually passes) will better convey an idea of the quality of the soil. It is altogether too light for grass. The crops we find most profitable to cultivate on it are winter rye, Indian corn, potatoes, and to some extent turnips. Oats might probably be raised to advantage were it not that the land is completely filled with the weed commonly called charlock, which render it entirely unfit for any spring crop, excepting such as can be hoed. The crops of rye, on the neighboring soil of the same nature, vary I believe from seven or eight, to twelve or thirteen bushels per acre, according to the cultivation and their approximation to the river. We usually raise on the land from thirteen to thirty bushels of Indian corn per acre. Potatoes are very good in quality, but the quantity is quite small; not sufficient to be profitable were it not that the land is very easily cultivated.

In the summer of 1827, we sowed three bushels of winter rye near the river, on about two acres of land, which produced twenty eight bushels.

In 1828, we sowed four bushels on four acres of land running the whole extent of the plain from the river. This piece was sowed in the spring with oats; but they were completely smothered with charlock, and about the middle of June, the whole crop was mowed to prevent the charlock seeding. By about the middle of August, a second crop of charlock having covered the land, it was ploughed very carefully, in order completely to bury the charlock; and then suffered to remain until the 15th of September when we began sowing the rye in the following manner. A strip of land about twelve yards wide was ploughed very evenly to prevent deep gutters between the furrows, and the seed immediately sown upon the furrow and harrowed in. Then another strip of the same width, and so on until the whole was finished. We found the oat stubble and charlock entirely rotted, and the land appeared as if it had been well manured, though none had been applied to this part, since it had been in our possession. The rye sprung very quick and vigorously, having evidently derived great benefit from being sown and sprouted before the moisture supplied by the decaying vegetable matter in the soil had evaporated to any considerable extent. This crop produced 123 bushels.

In 1829, the charlock was suffered to grow on the land appropriated to rye, until it had attained its growth and was in full blossom. The land was then ploughed very carefully and the charlock completely covered in. In a short time a second crop appeared more vigorous than the first. This also was allowed to attain its growth, and then ploughed in as before. A third crop soon appeared, which of course was destroyed when the land was again ploughed for sowing about the middle of September. This piece of land was a parallel strip running from the river, and containing two acres. Two bushels of rye were sowed. The crop presented a remarkably promising appearance, and yielded seventy four and a half bushels.

In 1830, the land appropriated to rye included nearly all the lighter parts of the soil, and owing to

a pressure of business was not attended to as we could have wished. It was ploughed in the early part of the summer. But harrowing to destroy the weeds was substituted for the second ploughing. This, and the unusual blight which affected all the grain in this part of the country, led us to anticipate a small crop. It yielded however fifteen bushels to the acre.

The land on which the crop of rye was raised the present season, had for the three or four previous years been planted with Indian corn. And owing to the extent of our tillage land, we have not been able to apply more than four or five loads of manure to the acre this season. The charlock was suffered to attain its growth as usual; and on the 18th and 19th of June it was carefully ploughed in. The second crop was ploughed in on the 6th and 7th of August. On the 14th and 15th of September it was sowed in the usual manner, namely: a small strip of land was ploughed and the seed sown immediately upon the furrow and then harrowed in. Then another strip of land was ploughed, and so on until the whole was completed. One bushel per acre was sowed as usual. The seed was originally obtained from a farmer in this vicinity, and I suppose is similar to that which is generally used. We have never prepared our seed in any manner, but have directed our attention solely to the preparation of the land; and to this we attribute our success. Owing to the unusual severity of the winter, the crop was considerably winter killed; but recovered very soon in the spring, excepting in the midfurrows. There, as the land lies very level, the water settled and so completely destroyed the rye that they continued bare the whole season. This would of course cause some diminution in the crop; perhaps a bushel or two. The rye was reaped at the usual season, and, as the weather was favorable, immediately put into the barn. The land contained one acre and thirteen rods and yielded *forty-six bushels and three pecks. A remarkably fine sample.*

In entering a claim for your premium, I would ask your attention particularly to the process of cultivation. It is, I believe, entirely new; and capable of general application.

Sowing the seed immediately after the plough we consider very advantageous to the crop. The soil being then moist, causes the seed to spring immediately, and gives a forwardness and vigor to the plants which they ever after retain.

The process of ploughing in three crops of weeds before the seed is sown very much enriches the soil. It would be altogether unnecessary to attempt to refute the notion, that by such a process nothing more is applied to the soil, than was before derived from it. If one could not discover by the light which Chemistry has shed upon the subject of agriculture, sufficient reasons for the contrary conclusion, observation, one would think, would be sufficient to convince any intelligent man of the fact.

And here I would suggest that I do not consider the experiment as we have conducted it, quite complete. To render it more so, in the first place, in ploughing in the weeds, I would not turn a furrow after the dew had evaporated. I have no doubt but that a large portion of that fertilizing quality in the soil, which (during the summer months) is continually exhaled from the earth, is by the dew brought again within our reach, and it would be wise to avail ourselves of the opportunity of again burying it in the soil. And in the second place, I would, by all means use a heavy roller after each ploughing. It would fill all the cavities left by the plough, and by

pressing the soil more closely to the weeds, at once hasten their decomposition and very much retard the evaporation from the soil.

But the land is not only very much enriched by this process. There is, I conceive, no method by which it can be so effectually cleansed. Three times during the season, a fresh surface is presented to the atmosphere, and each time, as the decaying vegetable matter increases in the soil, so is the exciting cause augmented to make a more vigorous effort. We have in this manner gone over nearly all our land which is infested with charlock, and the diminution of the weeds is quite sufficient to warrant the expectation, that in a few years it may be comparatively eradicated. Very Respectfully,

JOHN KEELY.

Haverhill, Sept. 22, 1832.

#### EUROPEAN AGRICULTURE AND RURAL ECONOMY.—FROM PERSONAL OBSERVATION.—By HENRY COLMAN.

We have received the 7th number of this work. It comes to us in the usual style of mechanical excellence, and is filled with matter of deep interest to agriculturists, as will be seen by the bird's-eye view which we shall give of its contents. We have, *first*, a continuation of the chapter contained in the last upon tile and pipe draining, a subject which might be turned to profitable account by many landed proprietors in this country, besides adding much annually to the national wealth, by the increase of crops; for it is evident, that tenacious wet clays, which remain a greater portion of the year supersaturated with water, are not competent to yield, within many per cents, the quantity of products which they are capable of producing when they shall have been properly drained.

*Secondly.* We have a chapter upon *Irrigation*, with examples of the value of this method of increasing the products of meadows.

*Thirdly.* The author gives a very comprehensive chapter upon the *Rotation of Crops*, as practiced in England, the which, although it may not be exactly adapted to the husbandry of this country, cannot fail to be fruitful of good results, as the system and the observations made thereon will awaken reflection upon many branches of culture, which are too much neglected with us.

*Fourthly.* The reader is presented with a chapter upon *Soiling*, a branch of Rural Economy which might be introduced with decided profit, to a greater or less extent, upon almost every estate.

The *fifth* and concluding chapter is devoted to a dissertation upon the crops of the British Kingdom. The average yield of wheat, says our author, is set down by statistical writers, at 26 bushels per acre, though it is only a few years since the average was but 18 bushels. Mr. Colman, so far as his personal observation allows him to speak, scarcely ever found the product less than 32 bushels to the acre, under good cultivation; frequently found it full 40 bushels—and adds, that he has been informed, on the best authority, that the yield on the reclaimed fen lands of

Lincolnshire, is very often from 56 to 64 bushels per acre. One of the best farmers in *Bercks* informed Mr. C. that on his large farm, in 1844-5, the average was 56 bushels—and it is well attested, that a farm in Norfolk, in the same year, produced 90 bushels 3 pecks per acre.

When, says Mr. Colman, "I received from most credible authority the account of this last crop, so very extraordinary as it is, I felt the strongest desire to ascertain, if possible, by what means it was produced, and especially whether there was any peculiarity in the soil, to which so great a yield was to be ascribed. This desire was felt as strongly by the members of the Royal Agricultural Society, and they directed the eminent chemist of the Society, professor *Playfair*, to make and report an analysis of the soil. Two portions of the soil—one of the surface, the other of the subsoil—were placed in his hands, of each of which he made analysis in two forms. We give his first analysis of the surface soil.

In 100 parts as actually found, there were

Of Organic matter	2.43
" Hydrate Water	2.60*
" Carbonic acid	0.92
" Sulphuric acid	0.09
" Phosphoric acid	0.38
" Silicic acid and Silica	81.26
" Peroxide of Iron	3.41
" Alumina	3.58
" Lime	1.28
" Magnesia	1.12
" Potash	0.80
" Soda	1.50
" Chlorine	a trace
Loss	63
	100.00

\*Water which is not driven off at the boiling point.

In the above analysis, there is certainly nothing extraordinary—nothing to which could be ascribed the extraordinary yield stated, so that the mind is left in doubt and uncertainty as to the cause of the success.

There is an experiment made by a distinguished farmer in Northamptonshire, upon six different kinds of wheat. The products, per acre, of which is thus stated.

Essex brown, yielded at the rate of	40 bus. weighing 64 lbs. per bu.
Surrey white,	36 " " 64 " " "
Brown, (cal'd clover)	40 " " 63 " " "
Snow-drop white,	39 " " 63 " " "
Burwell Brown,	45 " " 63 " " "
Whittington white,	38 " " 62 " " "

Wheat generally, says Mr. Colman, comes once in a 4 years' rotation; sometimes twice in 5 years, and in some cases twice in 7 years; in some every alternate year, beans forming the intermediate crop. The latter course, for 16 years, has been the practice of an eminent farmer in Norfolk, whose admirably managed farm, Mr. C. had the pleasure of visiting. The land subject to this treatment is a deep rich alluvion, formed from the deposits under the sea, and

the beans are most thoroughly manured. Upon the preparation of the soil for wheat Mr. C. remarks:

"The preparation of the land for wheat is made with extraordinary pains. The crop preceding it is usually turnip, which is consumed by sheep upon the land. The turnips are of course most amply manured and are generally cultivated in drills. When the season for sowing wheat arrives, these drills are opened by the plough, and the decomposed manure very thoroughly distributed. It is considered bad husbandry to apply green manure, or manure of any kind, except from the folding of sheep upon it, to the land, the year the wheat is to be sown; but the result is always better, when the sheep so folded, besides the turnips or other green feed with which they are supplied, are liberally furnished with oil cake."

Mr. Colman gives a cut of an implement used called a *Seam Presser*, for rolling and pressing down newly ploughed land, and of another called a *Clod-Crusher*, for breaking down and pulverizing hard clay soils. These implements appear to us simple and efficient, and we have no doubt are used very advantageously.

In noticing the present number of Mr. Colman's work, we deem it but an act of justice to that gentleman, to say, that every intelligent agriculturist should possess himself of a copy of his interesting work, which is now rapidly progressing to its completion.—Subscriptions received at our bookstore, \$5 for the ten numbers.

**THE TREES OF AMERICA: NATIVE AND FOREIGN, PICTORIALY AND BOTANICALLY DELINEATED, AND SCIENTIFICALLY AND POPULARLY DESCRIBED:** being considered principally with reference to the Geography and History, soil and situation, propagation and culture, accidents and diseases, etc. Illustrated by numerous engravings. By D. J. BROWNE, author of 'Sylvia Americana.' New York: HARPER AND BROTHERS.

We have received from the publishers a copy of the above work, which has been announced for some time as in course of publication, and we have no doubt will be found a most valuable addition to the library of every landholder. We copy from an able review of the work in the "*Kuicherbocker*," for September, the following notice of it, which is much better told than than any remarks which we could make:

"This excellent illustrated work of Mr. BROWNE has strong claims upon the attention of both the general and the scientific reader. The subject is treated of in a popular form, but at the same time with strict regard to scientific accuracy. The author has mostly followed LONDON in his arrangement, which is admirable; and in this respect the work will not suffer by comparison with the best works of the kind within our knowledge. First we have the genus with the order in both the natural and LINNEAN systems; then follow the synonyms, derivation, generic characters, general description, and geographical distribution. Then follow the species, with the synonyms; derivation of the name; a list of works in which the tree is figured; the specific characters; then a general description; varieties; geography and history; soil and situation; propagation and management; insects; properties and uses; and, in short,

every thing which is necessary to be known in order to obtain a full knowledge of the subject. The work is abundantly illustrated with engravings; and to make the descriptions easily understood, we have a figure of the general appearance of the tree, and another of the leaf, flower, fruit, etc.; and these are so true to nature, that any one at all familiar with the subject will be able at once to recognize each particular tree wherever he may meet with it. We have only to glance at this outline to perceive that the present volume has been a work of much labor and time, and we take pleasure in bearing our testimony to the care and accuracy with which it has been accomplished. In collecting his material, the author travelled into various and distant parts of the world, and thus had an opportunity not only of verifying and correcting the observations of others, but also of examining the trees of the countries visited under a great variety of circumstances, beside having had access to nurseries and the collection of amateurs. In addition to this, he has carefully consulted the most judicious writers on the subject; and as the result of all, he has given us a work which will rank high as a literary performance; and we feel confident that it will take its place among the standard productions of the country. The author's style is characterized by an agreeable simplicity, while at the same time it is sufficiently vigorous and spirited to enlist attention. But the matter and arrangement are of more importance than the style, in a work of this nature, and in this respect its merit is certainly very great. There is one very pleasing feature in the book which we cannot help noticing; we allude to the introduction of legends and historical associations connected with individual trees, which frequently have all the charm of romance, and serve as a relief to what may be called the dryness of scientific detail. The subject naturally affords many poetical allusions and interesting associations, and these are introduced with great good taste. The subject is interesting, and important in every point of view, whether we regard trees as subservient to usefulness, ornament, or as performing an important part in the economy of Nature."

"It will be highly useful to the farmer: in it he will find the most minute directions for laying out a plantation; the proper soil for each kind of tree; the best modes of propagation; the properties and uses of trees—in short, every thing necessary to be known to insure success and a profitable return for his labor; and it will also afford him the means of making a judicious selection. These remarks are not confined to forest-trees, but apply equally to fruit-trees, for the work contains ample directions for the cultivation of our choicest kinds of fruits, the best time and the most approved methods of pruning, beside a great deal of other useful information. Doubtless the work will be farther useful in promoting a taste for ornamental trees. We are surprised at the little attention this subject has excited in our large cities; we have decidedly too few trees, and those that we have, beside being many of them of the wrong kind, are shamefully neglected. Insects are allowed to collect on them in such great numbers that their beauty is entirely destroyed; and instead of their shade being sought as a grateful protection from the rays of the sun, they are avoided as objects of disgust. Why should this be? No good reason can be given; nevertheless this state of things will continue until a proper knowledge of the cultivation and nature of trees has been acquired; and we look to Mr. Browne's work to impart this knowledge, which will open to

its recipient sources of enjoyment of which he never dreamed before."

This work is on sale at Messrs. Armstrong & Berry's, and at our bookstore, at \$4.50.

#### To the Editor of the American Farmer.

With your permission, sir, I will submit a few inquiries, through the Farmer.

A writer over the signature of D. C. in your July No. advocates autumnal and winter following in preference to spring ploughing. This might suit on stiff land, or on any land intended for an oat crop; but would not spring ploughing be preferable on a red soil, inclined to throw up wheat under the action of frosts.

2d. Is it proper to fold cattle on such land in wet weather, as is practiced in Maryland and Virginia? I allude to the practice of what we call cow-penning at night.

3d. I would like to see something in the Farmer, relative to hill-side ditching. Should it realize all the benefits its advocates propose, all farmers in undulating lands should adopt it, as violent rains, sweeping away the soil, from the hills, are the greatest drawbacks to the improvement of our soil.

What is the origin of the New Oxfordshire breed of sheep, with the portrait of one of which you embellished your May No?

Which breed of sheep would you recommend for a Farmer on a small scale, who was convenient to market, for selling lambs and muttons?

Is not the wool of the Lincolnshire sheep too coarse?

Taking much interest in the culture of fruit, I would be pleased to see in the Farmer, further extracts from the writings of Van-Mons, and Knight on that subject. But few can get access to their writings. I doubt not they would interest many of your readers.

Can you, sir, or any of your readers, say whether the cherry-stone will probably produce fruit resembling the fruit of the parent tree?

I have heard much of the exquisite flavor of the Smyrna Musk-melon. Is that variety cultivated in the vicinity of Baltimore?

By the bye, Mr. Editor, I would ask for an explanation of a part Mr. Chiselm's interesting communication on fruit in the May No. He there says, he prefers budding buds that have started, or spurs, or even limbs, to using dormant buds or eyes."

The term budding, applying to the insertion of buds under the bark, how is it applied to spurs or limbs. The term grafting would be more appropriate, I think. Moreover, if he employ buds that have started, it must be in the spring, when grafting, not budding is done. However, I would enquire, if buds, taken from cuttings selected during the winter and preserved in a cool place, until the sap is in full flow, could not be used with as much success in the spring, as buds of the present year's growth, during the summer.

Is the valuable bean, described in the May No., a variety that requires poles, or the support of corn, or is it a low one that can be cultivated without such aid? The pole would be very tedious, and the corn would be injured.

You are acquainted, perhaps, Mr. Editor, with that excellent old fashioned dish-hominy, which, to be good requires the addition of some sort of bean. Is the variety spoken of, such a one as would be good for that purpose?

Would it be injurious or not to a flock of sheep to have them folded at night during the summer? Should it not be, it would be a rich source of the best manures.

Human urine being a strong manure, what would be the simplest and best mode of saving and applying it to the garden, and at what times can it be applied? Being very powerful, would it not require an intermixture with several parts of soil or mould?

Is fowl-house manure to be applied directly to vegetation?

I am much pleased with R. Sinclair's barring and ridging plow. The mould-boards are of cast iron of course, I suppose. Have they wrought iron shares and points, and what is the price of that, as also of his expanding Cultivator, an engraving of which last implement I would like to see in the Farmer.

We need some improvement in the old cultivator so long used in Virginia, and probably in Maryland, it being very *unsteady* in its movement, some one or more of the teeth not cutting at all, often, and then, but imperfectly. Indeed in ground tolerably grassy, I think it but of little, if of any avail. To be efficient, it is necessary, I think, to substitute mould-boards for the old-fashioned teeth or tines, consisting of merely bent pieces of iron.

The above questions, may perhaps, elicit information which would compensate for the trouble of insertion. Respectfully,

L. R.  
Louisa County, Va.

We shall reply to such of the questions of our correspondent L. R. as our present information enables us to do in our present number.

1. The "autumnal and winter ploughing" alluded to by our correspondent "D. C.," in our July No., looks to *tenuous* clays intended for spring culture. Therefore, is equally applicable to red as any other soil, the intended effect being to render them less tenacious by the alternate operation of freezing and thawing. No one, we should think, would ever dream of subjecting light soil to fall or winter ploughing.

2. Cattle, we believe should not be penned in wet weather.

3. We are not aware of the origin of the New Oxfordshire Ram, which was portrayed in our July No.—he looks very like a *Leicester*.

The Lincolnshire sheep of half a century ago were by no means highly esteemed; those of the present day have been much improved, and are getting into favor—the wool is coarse, but the fleece heavy.

If the sale of mutton and lamb be the object—the Southdown, or Leicesters, would probably be the best—the first would give the *best* meat, the latter, the *most*; while the latter would require a pasture in which it could fill itself without much exertion.

4. Opinion of the best informed writers tend to this conclusion—that trees produced from Cherry-stones will *not* produce fruit like the parent tree.

5. We have no personal knowledge of the particular bean alluded to. From a perusal of the article in our May No. we conclude it is a *bunch* bean—and have no doubt it would be good in hominy.

6. No possible injury could possibly result from folding sheep at night during summer—but if folded,

they should be *soiled* with grass or vegetables of some kind. Some of the best flock-masters in England fold them the year round.

7. Urine may be applied to the garden by *mizing* with every gallon of it 2 gallons of water—or it may be mixed with mould. In either case a small portion of ground plaster, or powdered charcoal, should be mixed with it to fix the ammonia and prevent its escape—that being the *cream* of the urine.

8. Chicken manure should be mixed with double its quantity of mould or rich earth, this mass would be benefitted by plaster or charcoal.

RAYENWOOD, Baltimore County, }  
September 24th, 1846. }

LIMING, WHEAT GROWING,  
MANURING, &c.

To the Editor of the American Farmer.

Sir: I thought it would not be uninteresting to you, or your readers, to transmit to them our *modus operandi*, or the manner of farming in this neighborhood. We have lands of almost every quality, from the poorest and shallowest soils to rich and productive ones, and of course different modes of farming.

The advantage of liming is now generally admitted; the effects resulting from it are so palpable and evident, that the most ignorant can no longer doubt the utility of it; they see old fields, which formerly were too poor to afford sheep sufficient pasture, in a few years after having been limed, produce luxuriant crops. The doubt of its utility is no longer an objection; but some affirm they are too *poor* to lime—that it acts too slowly, and farm still in the old short sighted way of their fathers, endeavoring to make the most profit they can, without regard to the improvement of the soil, and as a matter of course, they and their lands grow poorer every year; while others less able formerly than they, by practising close economy in their farming and household expenses, have been able yearly to purchase a little lime, and gradually to improve their farms and reclaim their waste fields, and they on the contrary are wealthier.

What is the best and most economical way of applying lime?—in what way will it act the quickest and longest? and what is the proper quantity? is now a source of inquiry and dispute. It is conceded that lime cannot be put on wrong, or rather, in whatever way it may be applied it will act beneficially. Some spread the lime on the surface of old fields which they wish to reclaim, where they say it decomposes the vegetable matter, and causes white clover to spring up, affording a fine sheep pasture for a couple of years; at the end of which time they plough it up, and put in corn: others think that while laying on the surface, it is of more service to the atmosphere than the land; that it absorbs carbonic acid gas from the air, (which the heat of the kiln had formerly separated from it,) and in a few years becomes almost as hard as the stone, and fit for re-burning; and also, that in working the corn, the lime sinks below the soil, and is soon out of reach.

These prefer to plough the old field, spread the hot lime, and harrow it in, then sow the field in oats, on which crop they know it acts immediately, and set it in clover; they think also that twenty-five or thirty bushels to the acre, put on in this manner, is sufficient for one application.

The wheat crop of this year turns out poorly, the grains are small and light, and when ground, produce

flour of an inferior quality. Early sowing is now generally preferred. Last year the fly attacked the wheat in the spring, when the stalks of the early sown were stout and strong, and were not much injured by them; but the late sown was almost destroyed. There is much difference of opinion respecting the management of this crop; some plough in the first crop of clover while green, let the ground be exposed to the summer sun, and early in the fall cross-plough it, and sow their wheat, which they say cleanses the ground and kills the weeds; but others object, that if the ground is foul it ought not to be put in wheat,—that the hot sun extracts the nitre from it, and bakes it,—that it derives but little benefit from the enriching influence of the dew, which, as all who are acquainted with the theory of dews know, falls in less quantities on the naked ground and on all light colored substances, than on the dark green of plants and clover,—that following the directions of nature, ground should always be covered, or remain naked as little as possible, and that the time when the first crop should be ploughed, farmers are mostly engaged in harvesting. These prefer to let both crops grow,—plough them in while the second crop is green, spread their manure, and put in their wheat with shovel ploughs or cultivators.—Some, more as a matter of convenience, than for any other reason, defer putting on their manure till winter, at which time they have more leisure; they then spread it on the surface of the ground. By which method much is lost by evaporation; and though the wheat may be, and is benefitted, yet the ground derives but little advantage from it in the second year; whereas, as we have but little manure, or not as much as we need, we should always apply it so as to produce the best effects and the most lasting.

L. F. B.

### THE "FARMER"—DURHAMS—PERUVIAN CORN.

KEARNEYSVILLE, VA., Sept. 24th.

To the Editor of the American Farmer:

SIR—I observed a laconic endorsement on the envelope of the last number of my Farmer, of "\$1 due," and I take it for granted that you can scarcely give us what you do in the Farmer, and wait long for your money besides. I enclose you the amount.

I wish to enquire of you whether there is any sale for thorough bred herd book Durham cattle, in or near Baltimore at present. In New York, I see they not only hold them in high favor, but continue to import them at the high English prices.

I have still a good part of my thorough bred, and if I could sell them at *any thing like a price*, I would be glad to dispose of them; for our system here is to keep a hardy, rough class of native cattle, such as will winter on our straw ricks and work them into manure; which the Durhams cannot stand.

I have the imported cow "Mistletoe," one of the very few cows in our country that stands in the English herd book in *her own name*, vol. 3rd. p. 523.

I have also the cow "North Point," calved a few days after the importation of her mother, (by Col. J. H. Powell,) and sired by the celebrated "Sir Thomas Fairfax," one of the most celebrated Bulls in England. I have also several of their direct descendants, by a thorough bred sire from the stock of Mr. R. D. Shepherd.

If there is any sale for stock of this kind let me hear from you.

[Any gentleman wishing to purchase stock of the above description, will please address the Editor.]

P. S.—Have any of your correspondents experimented successfully with the Peruvian Corn. I received a little seed this spring from the patent office, the produce of which in the way of "tall corn," (and you talk of tall corn in your last No. I see,) is among the very tallest. I measured a stock to day which was *seventeen and a half feet* to the top of the tassel in its natural position.

"You laugh, but sir I've got it yet,  
And can produce it."

And if you are curious in such vegetable monsters I will fold it up and send it down to you, to wind around your editorial sanctum.\* The stalks were generally 15 to 16 feet high, and the blades 4 to 5 feet long; *but*, (and there is generally a but in such great matters,) my corn was planted late, was very late in pushing its ears, and I fear will not mature grain enough for seed. From the great size of the plant, and its southern habits, I fear that our summer is not long enough to bring it to perfection, which is the reason of my enquiring whether any other of your correspondents has grown it successfully.

[\*Send it on.—Ed.]

R. H.

For the American Farmer.

### NEWCASTLE CO. AGRICULTURAL SOCIETY'S PLOUGHING MATCH.

The most exciting of all our Ploughing matches, was that which took place at the Newcastle County Agricultural Society's Exhibition, on the 16th of September, on the fine farm of Col. Andrews, near Wilmington, Del., at which festival it was computed that about 4000 persons were present; a great portion being ladies.

The land selected for trial was uneven, and covered with first and second crop clover and weeds, about three feet in height. Into this the ploughs were turned, without previous harrowing down or mowing; going across the old ridges in search for obstacles, every man being permitted to work his way, with the help of a lad to clear before his plough; the Committee reserving to themselves the right of declaring to whom belonged the premiums for the best work. This is a novel feature in our Ploughing matches, and deserves to be imitated, for what do farmers want with a Plough that cannot overcome obstacles? Here it was shown that to mow off or harrow down the strongest growth of vegetable matter before the Prouty or Centre Draught Plough, is worse than useless; it is labor lost and nothing gained. By them, the work was so perfectly done, that one of the spectators proposed to offer a tip for every spear of either weed or clover that could be found above ground. The result was most creditable to the Plough that has long been acknowledged to be "the best in the country for beauty of work and pulverizing the soil," the award of premiums being as follows:

#### FIRST CLASS.

1st Premium,	James Newborn,	} Prouty & Mears' Centre Draught Plough.
2d do	Wm. Banks,	
4th do	T. Trevitt,	

#### SECOND CLASS.

1st Premium,	George Jackson,	} Prouty & Mears' Centre Draught Plough.
2d do	George Grebby,	
3d do	Thomas Jackson,	

Six premiums out of eight, the number offered.

During the experimental trial before starting, one of these Ploughs, having a steady team of horses, was seen to pass furrow after furrow, without the aid of the holder, speaking volumes in favor of an implement which, in the hands of a lad eleven years of

age, was found quite equal to the labor hitherto considered as tasking the energies of the best men upon the farm.

Twenty Ploughs started for premiums, in two classes. The first class for men, the second for lads under 14 years of age; the winner of the first premium in the second class, a son of Mr. Bryan Jackson, being eleven years old only, having at the age of ten, the past year, taken the second premium at Newcastle meeting, and an honorary premium at Philadelphia, soon after.

Success attend "the sons of the Plough!"

Newark, 18th Sept., 1846.

B.

POOLESVILLE, August 21, 1846.

To the Editor of the *American Farmer*.

Sir,—I take the liberty of sending you an address, delivered before the Medley's District Agricultural Society, at its monthly meeting in July, by the orator for the day, Mr. P. H. McLEOD. I sincerely hope you may find space in the September No. of your very valuable (I speak not this as an idle sentence, for the numerous subscribers from this post-office prove more clearly than words in what estimation we hold the *American Farmer*) paper for its publication—and if the whole cannot appear, select what you please. By so doing, you will very much oblige

A SUBSCRIBER.

### ADDRESS,

Delivered before the *Agricultural Society of Medley's District, Montgomery co. Md. July, 1846.*

BY P. H. McLEOD.

MR. PRESIDENT:

I will not detain you by offering any remarks, about want of time, qualifications, and various other items, which are generally "better honored in the breach than the observance," particularly, in an association like the present one, wherein all those things are well known to each member—but at once proceed to offer a few remarks on those subjects, which by previous arrangement, were to occupy a portion of your attention to-day, to wit:—The influence of the Moon on vegetable life, and the causes which operate against the successful raising of the same crop during a series of consecutive years.

To render my remarks on the first part as plain as possible, it will be necessary to state a few of those general laws which govern matter, because from them emanate those effects which some persons assign to other and erroneous sources. One of the inherent properties of matter, is attraction or gravitation, which regulates, and causes to move in such beautiful harmony the heavenly bodies, producing those changes of seasons, on which the hopes of the farmers, and the fate of millions depend. This power, acts in proportion to the quantity and relative distance—hence the sun being the largest body in our planetary system, those bodies containing less matter, are compelled by this well known law of gravitation to move round him in different orbits and in different periods of time, receiving at the same time light and heat from this grand source of gravitation, in proportion to the square of their distance. These heavenly bodies are divided into primary and secondary planets, the former, revolve round the Sun, and the latter class, around the former.

The earth on which we live, is the third primary planet nearest the centre of the system; is attended during her annual revolution by a secondary planet called the moon, which revolves round us in about 29 days. Like the earth, she receives her light from the sun, by which means we perceive her in

her different phases, or gradual and periodical increase and decrease of light, according to her position in respect of the sun. She always presents the same side to us; her proportion to that of the earth is one to forty-nine. She is distant from the centre of our planet 240,000 miles. She attracts the earth at all times, but this power varies with her relative position—hence the different changes effected by her influence on the various elements of our planet, in proportion to their density. But perhaps you will ask me how does the force of gravitation change, since the moon is at all times in the same orbit as it respects the earth?

The reason is this, when the moon and sun act in conjunction, their united force of attraction act more powerfully on the earth, than when in different directions, which occur twice during one revolution of the moon round the earth.

From this we then learn, that the only power which matter exerts, at such a vast distance, is by attraction; when in contact it develops various other properties, unnecessary to treat of here. But as attraction acts in proportion to the quantity of matter, it follows, that the moon exercises but a small influence on the earth, except in conjunction with the sun, during which period this combined agency displays its power very plainly in the tide, and various organized bodies.

What is here advanced, concerning the only power which the moon exerts by gravitation, is equally applicable to the effect, produced by the different signs, through which the earth passes in making its journey round the sun. In so doing its path leads through clusters of stars, which the ancient astronomers, for the sake of reference named after things which they supposed the constellations fantastically imitated in shape—hence Aries the Ram, Taurus the Bull, Leo the Lion, Virgo the Virgin, &c., 12 in number, corresponding with the number of months in the year. These they supposed exercised great influence on all organized life, both man and plant, to such a degree as to affect the fate of the former, and decide the amount of the latter, which varied with the judgment exercised, in consulting said influence. By what agency, this wonderful power was, or is carried into effect, seems as yet wrapt in mystery, a mystery which in all probability will forever exist, since it rests on a basis, hard to be overthrown—popular error,—which is occasionally supported by the hand of science, which if any one doubts, he can satisfy himself by referring to some of our almanacs; he will there perceive a human subject, clothed in Eden style, with the 12 signs bearing on him like the darts covering the body of an Indian prisoner, but it is presumable, not exercising such striking effects, otherwise, existence would often be terminated by poor mortals, in order to fly to those regions of endless space—the fountain of this anatomical power.

Perhaps some one will here exclaim, what has all this to do with moon farming? I will tell you, sir; the foregoing proves that the only power exercised by the planets on the earth, is by gravitation; having arrived at this point, the next question which presents itself, is to what extent does said power act on organized substances?

We know that inert matter is acted on by gravitation; it must naturally follow, that as organized substances are principally composed of the same elements, they are similarly effected; to this action are attributed those wonderful results, of the moon in producing a good or bad crop, just in proportion as we have consulted her particular phase, when con-

signing to the soil any particular crops. But here we are at a loss, to assign a reason for this effect on plants continuing, since the cause which produced it is gone, and leaves a counteracting influence behind. The tides are familiar illustrations of the manner in which lunar influence acts. To render this however more plain, permit me to give an example illustrating the force of this paradoxical power. A. a moon man, takes advantage of the sign pointing down, to nail on his shingles, so that they may lay close to the roof. B. begins a similar piece of work, just as A. finishes, not however, before the sign changes, which causes them to point up (like the shoes worn during part of the sixteenth century in some parts of Europe.) Now can any gentleman here, assign a reason why A's shingles, should not point up as well as B's, when acted on by a similar cause?—so with laying a fence row—spreading manure—planting potatoes—sowing plaster, &c. To what then are we to attribute those wonderful effects which some farmers think, result from strictly adhering to signs in the management of crops?

It is in my opinion attributing to causes, which do not exist, results, which flow from judicious culture, in the absence of which, and a dependence on signs, as a substitute, will tend to little purpose, except to produce wonder. I am aware sir, there are some who would pronounce at once, the whole observance as superstitious and not worthy of such lengthy investigation. Such a course is wrong; respect for the opinions of those who believe in such influence, as well as the high source from which it emanates, justly entitles the subject to due reflection.

But since there exists no correct principles, on which to establish such a belief, how comes it, that so many in every age, so rigidly adhere to its observance, and what is supposed to have first given start to such absurd ideas? Such errors generally arise from the difficulty of detecting them. Where no tangible proof can be brought to bear, each may maintain his own opinions, without much fear of being defeated, particularly when supported by popular favor and sanctioned by long standing. Moreover there exists in man a degree of innate pride, which generally urges him to maintain error, when once embraced or originated by him.

From the earliest period, of which we have any record, we find man falling into those errors of opinion, many propagating them to such an extent, that the author of his being, on more occasions than one, warned him to depart from their observances; prompted, however, by the viciousness of his nature, he adopted those superstitious ideas, relative to charms, consulting spirits—signs in the heavens, and attributing to inanimate things the attributes of Divinity.

Promulgated by evil and selfish men, who seeking to elevate themselves, found it necessary to shroud their acts in mystery, and lay claim to supernatural agency, thereby obtaining an influence over their fellow man—in so doing, they did not neglect to suit every department of life. Hence we find recourse to those foolish practices in every situation in which man is placed, in order to produce effects whose natural causes they can't explain.

No wonder then, sir, that those errors have been of so long standing. Indeed they will still exist to a certain extent, until that amount of intelligence is diffused, calculated to dispel them.

As it respects myself, my principles, I believe, are fully established in the rejection of such absurdities. I consider Deity the source of all power, which is

imparted to man through two mediums, natural and supernatural—that this great first cause, has and does impart to some of his servants the exercise of the supernatural power, I believe—but that such power can be called into action by the application of some charm or nostrum, or that veil which covers futurity from man, can be removed by a fortune-teller, or by consulting signs, I do not believe, and I sincerely pity him who does—yet believe he must, who practises.

Why is it, sir, that charms, supposed to exercise a supernatural effect, are always used, when the impossibility of detecting them exists—thus: A has a sick horse; Mr. Bleeder, a skilful farrier, applies what he deems requisite to cure the animal, yet he gets worse. A. says, "Jim, get me the charm paper, I'll read it over him." Well, in a little time, probably, the horse gets better. Now, who can tell to what cause the cure is to be attributed—the medicine, charm paper, or nature? Yet the advocate of either can maintain his individual views, since the power of deciding is but opinion in the end. So with moon or sign farming—there is no tangible means of detecting the error; hence its continuance. A little reflection would soon enable a person to discover the falsity of all such agencies. But apart from the belief of such things, their observance frequently subjects individuals to delays and disappointments. Thus, a farmer intends planting a crop of beans or peas—the ground is in fine order, all ready—takes a peep at his old Almanac, when, sad to relate, he finds the sun has entered Virgo—nothing but blooming—if potatoes, and the moon points up—a consequent failure must naturally ensue—so he must wait until the signs are right.

Has he an animal to castrate, the sign of the Fishes must rule, which only affects the pedal extremities, consequently there is no danger of bleeding to death, which would infallibly ensue, had Sagittarius or Taurus been entertaining Sol.

The moon man will not commit his seed to the earth when the soil, but the moon requires it. He will not have his hair cut when the moon is in Leo, lest his locks would stare like a lion's mane; or when it is in Aries, lest they should curl like a ram's horn. Teaser says—

"Sow peas and beans in the wane of the moon,  
Who soweth them sooner, soweth too soon,  
That they with the planet may rise,  
And flourish with bearing most plentiful-wise."

While on the subject of signs, I presume a few words about other little practices so nearly allied as scarcely to be distinguishable, may not be deemed out of place. I mean charms and particular observances, which I think the sooner they are dispensed with the better. I do not presume, sir, that any member of this Society has any faith in their efficacy; yet by way of exhibiting the strong respect some folks still entertain for old times, permit me to enumerate a few which justly demand your most serious consideration.

Should any of your stock get sick, omit medicine, read over those charm papers, (some of them not many miles off,) they contain a supernatural agency that will soon effect relief—observe the necessary forms in receiving the paper, all depends on that!—be sure your children are standing by, so that they may learn.

If a dog should happen to taste your flesh, be sure you procure some of his hair, apply it to the wound, it will not only cure it, but prevent you from hydrophobia, in the event of said dog getting rabid—the

sympathetic link being broken, in consequence of abstracting a portion of his garment!

Do not trouble your neighbors for fire on particular days of the week—since borrowing that element subjects the giver to consequences very much to be dreaded by every reflecting mind!

Never begin work of a Saturday, 'tis very unlucky—nor a journey on Friday; if compelled, however, and you meet a bare-footed person with red hair, return, or make said unlucky mortal accompany you three steps: this is supposed to remove any unlucky consequence resulting from such meeting!

Stock should never be permitted to run on clover plastered during full moon—they will certainly burst, in consequence of the extending principle imparted to the elements of vegetation at this critical phase, and said extending principle is frightfully carried into effect, by rupturing the abdominal regions of all animals pasturing on it. However, said calamity can be averted by timely administering to them a little meal mixed with the rust of a plough taken off during the wane of the moon! In conclusion, of those enlightened practices, I would advise some of those good natured individuals, erroneously called crusty bachelors, just to partake of a bit of a cold supper, look over their left shoulder at the conclusion of the meal, and they will certainly perceive their future better halves—if the sign under which they entered this terrestrial abode, does not otherwise prevent! Such a sight might have a tendency of removing those dread anxieties said to dwell in those solitary hearts, of said much calumniated individuals.

I will now take my leave of this part of my subject relative to moon farming, and the whole train of errors connected therewith, hoping you will excuse me for thus detaining you so long on a subject very much inferior as it respects the interest of the farmer, to the investigation of what causes lands to get tired of the same crop when raised in continuation. To the consideration of this subject I shall at once proceed.

There are few farmers, who have not observed how luxuriantly some pines grow on a soil where others would scarcely vegetate; thus pines will enrich a poor gravelly or sandy soil, whereon oak, beech or ash would perish—so with wheat, potatoes, flax, rice, rye, grasses, tobacco, and all others of the vegetable kingdom: scarcely any two of which require a soil alike. From this we learn that the food of plants is different, or rather that they extract the elements, which constitute them in various quantities. This wise arrangement of nature enables the husbandman to devote his time and labor to such crops as are best adapted to his lands—moreover, it affords him by rotation in cropping, to augment his produce, and at the same time manage to enrich his farm. Neither of which could be effected, did all plants extract the same substances. The food of plants is derived from two sources, the soil and the atmosphere; by far the greater portion from the latter. Nearly 95 per cent of all vegetables is supposed to be supplied by it. This would leave 5 per cent for the soil. Small, however, as this per centage is, on it mainly depends the success of the farmer. The organized part is what the fire destroys—the ashes the inorganic; the amount of the latter varies with the nature of the plant. In proportion as the plant is exhausting to the soil will the ashes increase in quantity—thus, 100 lbs. of wheat straw dried to 212° F. produces 15 lbs.; rye 8, oats 4,—the composition of all are alike. The quantity of pine wood required to produce 83 lbs. of ashes, would, if oak, 250 lbs.; linden or hickory, 500 lbs.;

rye straw, 440 lbs. The ashes of those plants when analyzed consist of substances, or elements, varying with the nature of the plant; for the most part, however, potash, soda, lime, phosphates and silicates of different bases constitute their formation.

Now, 'tis evident that different plants extract from the soil different amounts of inorganic elements, or alkalies—and in proportion as the latter substances increase in the crop will it be found exhausting to the soil; hence two or three crops of the same kind in succession, deprives the land of its inorganic elements, and unless restored by manure or fallowing, there must ensue a diminution in the amount of crop. This is so obvious, that it is unnecessary to add more.

As the fertility of all soils mainly depends on the amount of alkalies they contain, the chief object of the farmer is to increase their amount by every means possible. This can be effected by different ways, first, by manure, compost, or turning in of green crops: the last named must mainly be depended on by those owning large farms—the accumulation of vegetable matter in the soil constantly changing into humus, finally into carbonic acid; this latter powerful agent acting on the various minerals containing the alkalies, rendering them soluble, fitted for the assimilation of the plant, teaches the tiller of the soil the vast importance of pursuing this system.

Had the early settlers of those districts, now comparatively destitute of vegetation, which checker all the old States of this Union, been more saving of those inorganic substances, they would have saved their descendants many evils and painful privations, the results of extracting from nature her treasures faster than she formed them. The supply of alkalies in nature is inexhaustible, but when we reflect that it takes hundreds of years to form a quantity sufficient for the cultivation of a fair crop, say of tobacco, we must necessarily conclude that the process of formation must be slow in the extreme.

They are found more abundantly in argillaceous or clay lands than in those of lime-stone or silicious soils. To their presence, then, are we to attribute those heavy crops of grain raised on those clay and lime-stone lands; and to their absence in our sandy soils, is attributed the small grain crop. Some farmers are of opinion that a good crop of grain is owing to the amount of vegetable matter in the soil, but experience proves that such is not the fact. In many of the Western States, where vegetable matter or humus exists to the depth of several feet, they cannot raise wheat profitably—so in a great portion of South America equally so. Why, then, is this the case? The alkalies have descended below the reach of the roots—silicate of potash required to give the straw consistence; phosphates, for the maturing of the berry, all being absent; the plant grows, 'tis true, but never matures.

Now, on the other hand, with what fertility the wheat flourishes on lime-stone and red clay soil, where you can scarcely detect any vegetable matter. Moreover, we find in some parts of Europe, Naples, for instance, and those lands about Mount Vesuvius, that the grain farms have been producing grain for thousands of years, without any apparent diminution in the fertility of the soil.

This, sir, is entirely owing to the vast quantities of alkalies contained, being for the most part of volcanic formation. The mode of culture the farmers of that country pursue plainly prove the capability of lands producing grain in the absence of humus.—When a crop is taken off, the field is left to rest for a few years, used as pasture—nothing is applied as a

manure, consequently there can be no accumulation of humus. This is not required; the rest is given in order to restore the alkalies, or rather to render them fitted for the next crop, which is effected by the action of the atmosphere, termed disintegration, or a dissolving of those bases which contain them. I shall not proceed further on this subject, which, I presume, few entertain any doubts of. What, then, results from the investigation of theory?—a knowledge of the constituents of plants and their mode of assimilating them. Having determined on this point, it follows that if a crop, say of wheat, is raised on the same field for several years in succession, there must ensue a decrease of those elements, that will lead to a complete failure in the crop—which effect some farmers call 'the lands getting tired.' The amount of carbon extracted from a soil, is more than compensated for by what remains in the form of stubble, roots, &c.

A fact to illustrate this proposition—

I shall now proceed to the second cause of land getting tired of the same crop in annual continuation. Few persons capable of making observations, have not observed how poorly a plant grows, when planted where one of a similar species grew for a number of years antecedent to its planting. Thus, if we wish to renew an orchard, rendered unproductive by some cause or other, experience tells us the better plan is to cultivate some crop for a few years ere we again plant in apple trees. Now this is somewhat strange, since all the elements necessary to vegetation are in abundance in the soil; nor will even the seed falling on the ground flourish as well as when sowed elsewhere. The best meadow land, though increasing in all the constituents of vegetation, will in a few years lose all its productiveness. Various causes are assigned for this effect, many of them too ridiculous even to mention, much less to adopt. The most rational views on this subject with which the farmer have been favored, are from the pen of *Decandolle*, and mainly confirmed by *Leibig*. Plants while growing, have the power of absorbing from the soil substances which are wholly unsuited to their growth; these are excreted back to the soil in the form of excrements, together with the excretions formed by the peculiar action of the elements of the plant. And here we must learn to distinguish between the excrements of a plant and the excretions—the former consist of substances not required by the plant; consequently, after ascending through the veins or tubes of the tree or plant, they return through other tubes and are excreted by the absorbent radicals or roots. But the other substances, termed excretions, are the result of a peculiar internal action of the plant. In some vegetables they are poisonous, in others the very reverse.

Thus, then, when this matter surrounds each root and fibre of the plant, which they are never found to again absorb until it undergoes great modifications—the plant must necessarily languish, as it were, for the elements excluded by this loss of body guard.

It is very evident, as this matter increases the plant will proportionably fail. The action of this matter is more perceptible on annual plants than perennial. When the excrements of one plant is assimilated by another of a different species, they will grow rapidly together: thus, beans will grow with corn, grasses of almost every description will follow grain crops.—From this it is inferred that the refuse of the one becomes the food of the other; this, together with the well known fact that grain crops require inorganic substances, which are little required by grasses, to

the accumulation of those excrementitious matters in the soil, is to be attributed the deterioration of meadow lands.

By what means does the farmer destroy the noxious qualities of this matter—by rotation in cropping or by irrigation on meadow land? By sowing clover after wheat, the excrements of the latter plant may in part be assimilated by the clover, or by their decomposition, again rendered in two or three years to become food for the plant which produced them—fallowing produces this effect. On meadow lands this is more rapidly effected by the moisture or irrigation of water, the oxygen of which acting on those substances decomposes and converts to humus, which by the spring following, those substances are again prepared for the growing plant. But no doubt you have observed in those meadows where irrigation cannot be produced, barren spots occasionally dotting the surface of the ground, which in a little time will be distinguished for their verdure and luxuriant growth. This is owing to the cause just assigned. When barren, the excrements are then undergoing the action of decomposition and final change to vegetable humus, which will again afford food and nourishment to the plant until a like cause produces a similar effect.

In those parts of the earth where the virus overflows the adjacent lands annually, as in Egypt and some parts of Asia, the inhabitants are enabled to raise the same crop year after year. The alkalies are in the greatest abundance; the carbon and excrements of the plants are in the course of irrigation converted into rich humus, the food of the young plant, until it arrives at a state to assimilate part of its food from the atmosphere. The excretions of some crops require a longer time to rot and decompose in the soil than others—thus flax, hemp and wheat, are crops that will not do to cultivate in as quick succession as potatoes, clover and beans.

For the American Farmer.

## TO THE YOUNG FARMERS OF MARYLAND.

### ESSAY No. 7.

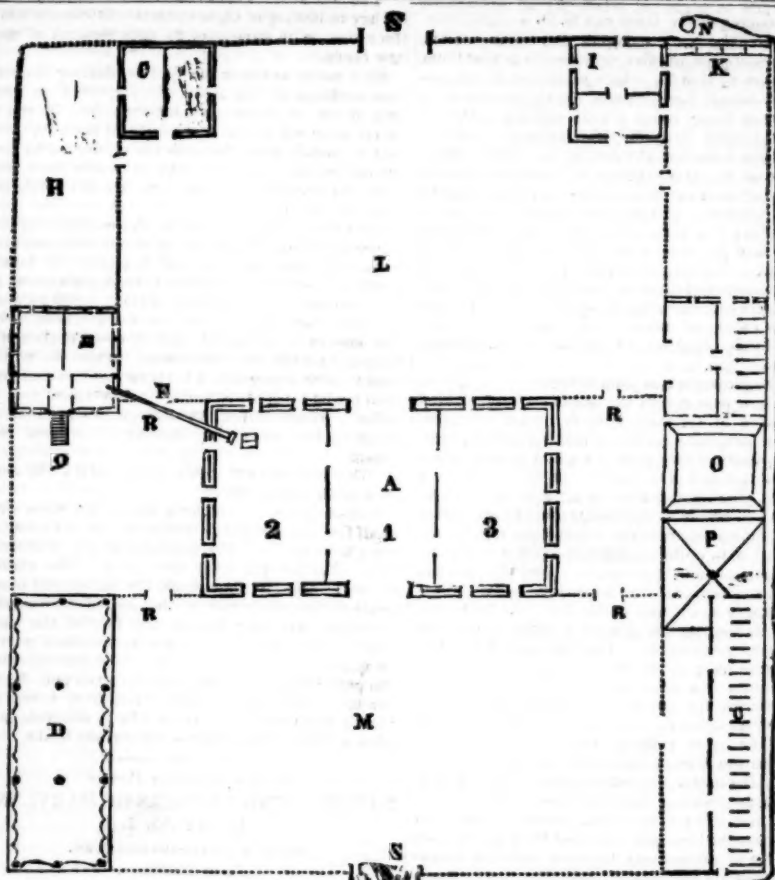
#### ON PRACTICAL AGRICULTURE.

##### Farm Buildings.

In submitting to the intelligent readers of the American Farmer, a plan upon which to construct economically, at least in point of convenience and arrangement, the several farm buildings essential to a well conducted place, we would rather be supposed as offering a few practical suggestions, to be improved upon, by those engaged in building on their property, rather than as presenting a strictly architectural plan, claiming professional correctness of detail.—In a word, we profess to write as a farmer, to farmers, about barns and stables; and not as an architect to country gentlemen, who wish to find a new outlet for their surplus means, in the pleasurable occupation of demolishing and constructing anew.—Indeed, so far from this, were we disposed to digress, we would give you the Irish maxim against the propensity to destroy, too prevalent among us, in their resolution "to construct the new jail on the site of the old one, out of the old materials: but to let the old jail stand, until the new one was completed"—but we won't do so!

Among the many requisites, the aspect is the most important. The situation, in respect to the dwelling-house; to the servants quarters, and relatively, to each other, is next to be consulted.

In locating the site,—warmth, water and ventila-



FOUNDATION PLAN OF A BARN.

tion, at certain seasons, are almost equally to be desired.

Convenience to each other—while avoiding contact—and to the farm generally, is especially to be sought.

Supposing the dwelling-house to be already in the best attainable situation on the farm, or intended to be placed there, if still in contemplation, the farm buildings and other offices should, this side the Alleghanies, lie toward the east of it; because the dry western winds, combined with the sun's rays in clear weather, produce evaporation, and waft the miasmatic effluvium toward the dwelling. The east winds, on the contrary, occasioning dampness and rain, suppress, during their continuance, these decomposing influences. For the same reasons, the kitchen garden and other rank vegetable growth, subject to fermentation, should never be permitted to lie toward the west of the homestead, unless very remotely, or there be a wood intervening, to arrest and absorb these animal-life deprivatives.

Where a natural choice presents itself, or even when some artificial assistance is needed to affect it, a gently sloping, southwardly exposure, with a forest near, is to be preferred before all others, for these several buildings.

Stone is the most durable and generally easily attainable material for the more permanent buildings. It makes a cooler house in summer, and a warmer in winter, than brick; the vapor which condenses on the wall, so far from being an objection, assists in reducing the dampness of the contiguous atmosphere; besides, it is incombustible. Board and frame, for the more temporary buildings, or those of lighter construction, is sufficiently durable, and generally cheaper.

In regard to the size of the barn, or comparative size of any of the other structures pertaining thereto, every farmer's intelligence will direct him to proportion each to the productiveness of his farm, in the several branches of husbandry. On some plantations, or estates of considerable extent, several barns may be needed; but even in such case, the main or home barn, should occupy a central position, in respect to all the other out-buildings on a farm.

The foundation plan appended to this paper, occupies a square, two hundred feet on a side, or forty thousand superficial square feet—an extent of area easily spared on a farm of two hundred arable acres; to which quantity, in a productive state, in grains and grasses, this diagram has been proportion-

ed, as nearly as might be, when relying necessarily upon estimates.

A stone barn, (A.) occupies the centre of this space, exactly seventy five feet from the north and south, and fifty feet from the east and west extremes of the enclosure; being, consequently, precisely one hundred feet front, running east and west, by feet deep, from south to north, fronting south. It is of three stories—the lowest floor, in the centre, (No. 1) is raised seven and a half feet above the level of the ground, and is of two inch plank; opening on either side by arched doors, sufficiently large to admit an ordinary hay wagon, laden with grain in the straw, on the north side, and when unloaded, its exit by the south door. On this foundation there are two large rooms (nos. 2 and 3,) forty by fifty feet each, leaving the passage way to be about sixteen feet wide, clear, and being so arranged, as to open on the wagon floor, half way up from the ground, this being fifteen feet high. The floors of the two second story rooms of same size are consequently seven and a half feet above the wagon floor, and being twelve feet clear, in height, cause the upper flooring, which extends over the wagon floor, to be within reach of a fork on a load of grain, or about seven and a half feet from it. The whole third loft is in one; is ten feet to the eaves, with a roof of forty five degrees pitch, and has four hatchways, one over each edge of the wagon floor, and one in the centre of each end, over nos. 2 and 3. The north side of the second story rooms of no. 2, is the threshing room; the horse power being placed on the wagon floor, and the straw passed across it, as from no. 2 to 3.

The square figure in this room (middle, no. 2) represents a temporary garner for cleaned grain, to be passed into the granary (E.) through the spout F.

The vacant space beneath the wagon floor, can either communicate with the ground floor rooms, or be so arranged as to receive the horse-power and other machinery, when not in use.

The several stories are reached by rounds or strips, let into two of the scantlings, which sustain the edges of the floors, by the side of the wagon floor.

To sum up—a stone barn of three stories, with twelve narrow, or seven wide windows in each room, from half way up, to the top, or ceiling, for ventilation and light—four being on the end, and four on the north and south side each.

The dimensions are one hundred feet front by fifty deep and thirty seven and a half feet to the eaves, with a roof at a pitch of forty five degrees.

Suitable props or pillars, should be placed under the transverse beams, which support the ends of the joists, there being two of these and three sets of joists in a space of fifty feet.

The horse-stable of stone, (no letter,) stands twenty-five feet east of the barn and runs twenty five feet deep on a line parallel with the north side of it; fronting west thirty seven and a half feet, of two stories, twenty five feet to the eaves, with two rooms on the lower floor—the west one, fifteen feet by thirty seven and a half, including walls, for the carriage and wagon house: the east apartment being the stable, ten feet by thirty seven and a half, containing eight stalls, four feet six inches clear, each, wide, by seven deep, allowing a three feet passage behind, which opens into the carriage room, and also into a yard, thirty seven and a half by twenty five feet, and out on a space ten feet wide, between the stable and the manure vat O. A small narrow window opens into each stall, on the east, to be closed when too cold, to admit light, besides two windows on the side of the north and south walls.

The loft above is designed for a sufficient quantity of hay to last eight horses, three months, or about four tons; with rack-holes to each stall. Owing to the necessity of using lights at some seasons, in the stable, many entire crops in the barn above, have been consumed; while the abundance of combustible matter in a state of ignition, has almost always rendered the salvation of the horses and other cattle, under these circumstances, impracticable.—These two great objections to combining barn, horse and cow stables under one roof, are, we think, obviated by the plan we recommend.

The space occurring between the south end of the horse-stable and the north end of the cow house, is a square of fifty feet. The west half of which is vacant, a roadway being on it, from R.—the east half is occupied by the manure vat, O, twenty five feet square, with sloping sides, five feet deep,—and a manure shed, (P) twenty five feet square, projecting ten feet beyond the north-west corner of the Cow-shed; with a pointed, quadrangular roof, on posts, twelve and a half feet high, above ground. This shed is to put compost manure in, after its removal from the vat, or in which to let green manure decompose.

The cow shed (C,) lets into, or rather passes under, the manure shed, ten feet, to a line parallel with the front of the barn, commencing thirty seven and a half feet east of it, and running twelve and a half feet, to a line parallel with the east side of the horse-stable; thence seventy five feet south, to the south line of the enclosure: being twelve and a half deep by seventy five feet, west. There are in the middle of this space twenty stalls, three and a half feet by five and a half, clear. Leaving a passage in the centre to a space three feet clear before, at the head of the stalls, to pass in hay, and feed into the troughs—a water trough, with running water, should pass along this passage, from north to south, behind the feed troughs, but within reach of the cattle, leading from a spring or pump, (N.) hereafter to be described. The other passage of three feet, before the stalls, contains a urine-duct leading to the manure vat. The three doors and windows on the west side open on a small yard, with open fence, the same size as the shed, into this the solid excretions are cast, to be wheeled into the vat. A window for ventilation, stands at each end of this passage. Boards hung on hinges, on the east side, answer for windows and to pass hay and green feed through when soiling, from the outside—the space above the stalls is entirely open, with ventilating windows of board, on the upper part of the east side. The end of the shed is seven and a half feet to the eaves and twelve and a half to the point.

The hay-mow occupies the corresponding corner of the south yard, M, and is twenty five feet by seventy five, with two compartments, forming three square sections of twenty five feet—the north end commences twenty five feet west, on a parallel line drawn from the front of the barn, running twenty five feet, and thence seventy five feet to the southwest corner of the enclosure.—A fence should be set before the hay-mow, three feet distant, to prevent the incursions of the stock. The mow is constructed on the same plan as that described in our paper on grasses in the September number of the Farmer for 1845.

A yard, O, fifty feet square is at the west end of the barn: this has a road through it at R. and leads to the granary. The yard might, from its protected situation, be used as a sheep or calf yard, in winter.

E. is the granary, a rat-tight frame building, on

wooden pillars, twenty five by twenty five feet front, east, divided into four rooms or garrets—two, twelve feet square clear, and two, having the passage between them, twelve by ten feet—the grain-spout, F, about thirty five feet in length, passing from a window on the north-west corner of the barn, into the south-east room of the granary, through a window, and being movable, should not be left up when not in use. The stair-way should also be removed when not used, to exclude vermin. The corn-room should be slatted.

Behind the granary, of same width, and running back fifty feet, is a yard, occupying the north-west corner of the enclosure;—which is intended for the poultry yard, passing under both the granary and poultry house, G, 25 feet square, which is also on posts, and connecting with the latter, on the north east corner, gives the poultry yard an area of twenty five hundred square feet.

The poultry-house (G.) above described, stands directly north of the space west of the barn, produced by a line drawn north, from the corner of the hay-mow and past the east side of the granary; being thirty seven and a half feet from the granary and sixty two and a half from the barn, and designed to cover the north point, otherwise open toward the south yard, M.

The tool, feed and seed house, is also twenty five feet square, and covers the corresponding space, east of the barn—it is of two stories, each twelve feet clear in height, and divided into two equal sized rooms—those below for the tools and implements, and the two above, one for ground feed and the other for seeds. Both the poultry and the tool house are twenty five feet from the ground to the eaves, with pointed roofs. K. is the piggery, with the range of the yard attached, at proper seasons.

N. is a spring or pump, from which water is conveyed through the piggery, the stable yard, the horse-stable, if needed, and then over the east bank of the manure vat, through the cow shed as before stated. A branch should also pass into the poultry yard.

It will be perceived that this disposition of the several buildings around the barn, secures a well-protected barn-yard, (M) with a southern exposure, sufficiently ventilated, but no where open to a strong current of cold wind. The poultry and tool house, with the barn, forming a north wall: the granary and the horse-stable, covering the north-west and north-east points, respectively; the south-east sufficiently covered by the cow-shed, but admitting at an early hour, the sunshine in winter, while the hay-mow, convenient to the cattle-yard, breaks the force of the westerly winds.

The north-yard (L.) on the contrary, is exposed to every point of the compass, in certain parts, and is intended for a summer yard; a very useful place where cattle are soiled, or even yarded for the night.

We are aware that our description, already too long, is yet very incomplete; any information we may be enabled to impart, to those seriously contemplating the erection of Farm Buildings, will be freely rendered, on application, to the address of

Very truly, yours, CINCINNATUS.

**CORN MEAL IN ENGLAND.**—We learn that owing to the anticipated shortness of the Potato crop in England and Ireland, that the price of Corn Meal had gone up to 32 s. per quarter, which is about 96 c. per bushel, and was still gaining favor with consumers.

## THE AMERICAN FARMER.

BALTIMORE, OCTOBER, 1846.

### The American Farmer.

The 2d volume of the new series of this journal commenced on the 1st of July, 1846—It is issued on the 1st of each month.

Terms:—Single copies \$1—Six copies for \$5—Thirteen copies for \$10.—Thirty copies for \$20.

Sample Nos. will be sent to any one desirous of aiding in the circulation of the "Farmer."

Address SAMUEL SANDS,  
Publisher American Farmer,  
122 BALTIMORE STREET, BALTIMORE.

**TO THOSE INDEBTED TO US.**—On the envelope of our Sept. No. we noted the amount which each subscriber was indebted to us for subscription to the "American Farmer"—and we render thanks to those who have promptly responded thereto.—To those who have not done so, we would earnestly urge the fact, that to enable us to do justice to our publication, we must be placed in possession of our dues—a publisher may be embarrassed with a superabundance of patrons (?) if the "sins of war" are withheld. That our labors are worth the patience required of each subscriber, we feel an honest conviction that no one can gainsay—the numerous testimonials which we are daily receiving, proves that our journal is fully worthy of the patronage bestowed upon it, and of the small amount required for it—if there are any now in the receipt of it, who are of a contrary mind, we beg they will notify us thereof—we desire not to force it upon any one; but if they are satisfied that it is worth to them the price of subscription, we have a right to expect that a prompt compliance with our terms will be made—the postage is trifling, and tho' we would prefer each one to pay the same, yet we will pay that tax rather than be delayed in the reception of our dues. To the subscribers the amount is a mere trifle required for a volume of near 400 large pages of valuable matter, but to the publisher, the aggregate is a heavy amount—and we hope prompt attention will be elicited to it.

☞ We would take occasion to remark, that in some cases we have discovered since our last issue, that payments had been made to authorized agents from whom we had not heard, and in one or two cases (Greensboro', Ala. and we believe in Chestertown, Md. lists) erroneous charges were made.

**OUR PREMIUMS.**—In the 1st No. of the present volume, we offered a very liberal list of premiums to those who should, by the 1st of Jan. next, obtain the largest additions to our subscription list. Altho' we most thankfully acknowledge the very considerable additions which have been made by the kindness of our friends, many of whom have complied with our request to forward one or more new subscribers, (and some of them have extended the number to five and ten,) yet the number received from individuals is far from being in accordance with the magnitude or value of the premiums offered. In making the proposition, we contemplated receiving something like the number of new subscribers which would at least realize to us the money value of the works offered—but thus far, the indications are not flattering, and we allude to the matter now, in justice to ourselves, to qualify our proposition, as we should have done when originally made, in accordance with our intentions and expectations as expressed above. To our friends in Poolesville, Clear Spring, and Milestone, Md. we would say, that they are in advance of any others, and they will not find us wanting in liberality at the appointed time.

### MARYLAND FARMERS' CLUB.

The next meeting of the Club will be held at the office of the President, John Glenn, Esq. in North Charles st. on SATURDAY, 10th inst. at 11, A. M. A full attendance is particularly desired, and the meeting will take place without regard to weather.

By order, SAM'L SANDS, Rec. Sec.

**POTATO ROT.**—We refer to the article on succeeding pages, copied from the London Illustrated News of Aug. 19.

**THE FAIR of the American Institute** will be open to visitors on the 5th Oct. inst. at Castle Garden, New York—It was to have been held at Niblo's Garden, but that establishment has recently been destroyed by fire.

*Correction*.—Our respected correspondent, "J. F. S." requests us to correct an omission of his, in his communication published in our Sept. number, upon the "culture of the potato." The sentence descriptive of his mode of culture, should have read, "heavy manuring in the hill with undecomposed manure from the horse stable," the words italicised being omitted by him in his manuscript.

Our answer to the question which he put to us, was dictated by the best feelings, and written in the most kindly spirit. Had he not addressed himself to us, we should not have ventured upon a solitary remark,—courtesy would have restrained us from presenting ourself in the light of an intruder; but as our opinion was asked, and we felt honored by the distinction, we gave it with that ingenueness due alike to truth, and to the respected source whence it emanated. It was far, very far, from our intention, to say aught to wound the feelings, or visit our correspondent with a "reproof," however "gentle,"—for being sensitive ourself, we are scrupulously careful of the feelings of others. We, therefore, trust that J. F. S. will rescind his determination of abandoning the pen, and that we shall often be favored with the results of his experience, as we feel assured that our readers would be gratified to hear from him often.

**MARL**.—A correspondent asks us if the specimen of marl from the farm of Mr. Welch which had been examined by Prof. Baer, had been analyzed, or if not, the general character as to whether it was clayey or sandy, and the approximate per centage of lime—and also at what price the clayey marls can be furnished, to be delivered on the shores of the Chesapeake in quantities of 500 bushels or upwards.

The specimen alluded to was not analyzed by Mr. Baer; his opinion was founded on a casual examination.—Mr. Welch would probably find his interest in having it analyzed, which could be done for a small fee, the result of which we would with pleasure give to the public through our columns. Those having marl which they would dispose of, are invited through the same source to reply to the latter portion of our correspondent's query.

**NEW-CASTLE (Del.) AGRICULTURAL FAIR**.—The Exhibition of the society, held at New Castle on the 16th ult. was, we learn, attended with complete success, and was creditable in a high degree to the public spirited farmers of that gallant little state, who richly deserve the thanks of their fellow citizens for their persevering labors to advance the interests of their calling, and the prosperity of their state.

We have not received the particulars of the Fair, but a correspondent has furnished us with an account of the Plowing Match, which will be found on another page. Our correspondent would have rendered his account more perfect and satisfactory, had he given a list of all the successful candidates for the honors awarded by the society.

**MONTGOMERY CO. (Md.) AGRICULTURAL FAIR**.—We publish with much pleasure the proceedings of the Montgomery county agricultural society held at Rockville on the 10th ult., which, we learn from a correspondent, was a very spirited affair, considering the very limited time which was allowed for preparation. We hope the society, now they have made a beginning, will persevere in so noble a cause, and that they will do so, we are encouraged to believe, from the fact, that they are aided in their labors by the countenance and support of the fairer portion of creation.

**PRINCE GEORGE'S Co. (Md.) SOCIETY**, hold its 6th Annual Fair on the 29th and 30th October inst., at Upper Marlboro. We may expect an exhibition worthy the high fame which this society has attained—the Prince Georgians are not accustomed to do things by halves.—Dr. J. H. BAYNE, the celebrated Horticulturist, is to deliver the annual address,—and to add to the interest of the occasion, we learn that Col. Capron's fine troop of horse, which excited such a sensation in this city on the 12th Sept. by its noble bearing, is to visit the Exhibition.

**PRESENTS**.—We are indebted to Mr. Tho. Hartley, of Baltimore county, for some of the pound Pippin Apples raised by him; they are as beautiful a fruit as the eye could desire to behold, and as delicious to the palate as the most fastidious taste need require.—From Messrs. Sinclair & Corse, several bouquets of splendid Flowers, for which our "better half" unites with us in rendering thanks.—To our old and long tried friend, D. W. Naille, esq. of Frederick, we are indebted for a barrel of superior family Flour, manufactured at his mill on Sams' Creek.—The lady whose opinion of it he asks, will report to him in person, when he passes this way to the seat of government the coming winter. For our part, we can only say, that the short cake and hot rolls made from it are "hard to beat."

We cannot but acknowledge that we feel flattered by the reception of such testimonials as the annexed, from a gentleman of St. Mary's, who, not content with rendering service to his fellow-citizens in the councils of his native state, is anxious to aid in the dissemination of that light and intelligence in regard to their every-day affairs, which, if duly appreciated, will materially aid in developing the natural resources of our state.—In forwarding the names of sundry new subscribers, he remarks: "I cannot forego the pleasure of expressing my gratification and earnest approval of the able and efficient manner in which you have discharged the duties of editor since I have been a patron of your work; and I earnestly hope your success will be commensurate with its merits. I hope soon to be able to furnish you with an additional list of subscribers."

**THE CROPS**.—The late arrivals from England bring us accounts of the total failure of the Potato crop of Ireland, and a demand has sprung up for our breadstuffs to aid in supplying the requisitions from abroad consequent thereon—a decided improvement, it will be seen, has taken place in grain and flour, in our market, predicated on this demand.—The grain crops of Great Britain, it is thought, will be about an average; but in France, they are decidedly deficient—the rye harvest has so completely failed, that there will scarcely be sufficient seed for next year; the Potato rot is also prevalent in many provinces. Portugal is menaced with famine, and her neighbor, Spain, cannot spare aught of her supplies—and it is said that among the countries which commonly export corn, Pomerania has no wheat to spare; Mayence cannot suffice for the demand of Switzerland and of Alsace; and that Alexandria and Odessa have no wheat in their stores, the prices having risen before the failure of the Potato crop in Ireland was known. The London Morning Chronicle of 1st ult. makes the following statement: "It may be said generally, that throughout the whole of the south of Europe, the wheat crop is deficient, especially in the countries bordering on the Mediterranean, which will all require considerable aid to make out the year's consumption. In central and northern Europe the wheat crop is better, but nearly throughout, with some exceptions, the rye crop has failed. There is a considerable demand for wheat in the Rhenish provinces. There are buyers here from Germany, looking for wheat in bond for shipment thence. It is the opinion of some of the best informed continental merchants that all the wheat of inferior quality which comes into this country will be re-exported in bond."

¶ If these statements are to be relied on, and we have no particular cause to doubt their general correctness, our farmers have reason to anticipate a considerable demand and remunerating prices for their surplus productions. There can be no doubt as to the almost entire destruction of the Potato crop in Ireland, and the great injury it has sustained in other parts of Europe, as well as this country, which of itself will require vast amounts of other produce to supply the deficiency.—Our Corn, we think, will find a steady market with good prices.

**TOBACCO**.—We learn from a gentleman of Anne Arundel that the loss to this crop has been very great, occasioned by the worms—and that more than half a crop cannot be expected, as less than the usual quantity of plants was set out. The *Mari-bro' Gazette* brings us similar tidings in regard to the crop of Prince George's—and by indications from other quarters, we have reason to expect the crop will be a decidedly short one.

¶ We copy from the *Ohio Cultivator*, the following notice of the Agricultural College which Mr. Gowen has in contemplation to establish near Philadelphia, as noticed by us a short time since. We hope that many of our Maryland farmers will

avail themselves of the opportunity of placing their sons under the charge of Mr. G. whose qualifications for the discharge of the duty which is to devolve upon him, are well known to our readers. In speaking of this proposed institution, a very distinguished agriculturist of Virginia, in a letter to us, says:—"It will be of infinite value to the sons of Southern landholders—and if Mr. G's life is spared, he will do all for it that enlightened public spirit, liberality and patriotism can do."

#### AGRICULTURAL COLLEGE AT MT. AIRY.

We informed our readers, some time since, of the announcement in the Philadelphia and other papers, that Mr. Gowen, of Mount Airy, near Philadelphia, had purchased the Mount Airy College property adjoining his fine estate, with the view to the establishment of an institution for the instruction of youth, in theoretical and practical agriculture, including horticulture, upon the most approved principles of enlightened experience and rational science. The deep interest we feel in the advancement of these great and interesting pursuits led us to make inquiry of Mr. Gowen respecting the prospect there was of such a noble enterprise being commenced, and we are happy to inform our readers that there is a fair prospect of the institution being opened next spring, should proper encouragement be afforded, and the health of Mr. Gowen, which for some time past has been delicate, permit him to bestow such personal supervision as would be required from his position as patron of the institution.

We cannot but regard one of the contingencies on which the opening of the college depends, as not very serious, namely, the assurance of sufficient patronage; for what farmer of the West, or planter of the South is there who would not rejoice at an opportunity of having a son educated at a college where, in addition to a scholastic education befitting a gentleman, he would be qualified for conducting, in the most efficient and economical plan, every species of agricultural husbandry? The state of Mr. Gowen's health, we think, is more to be feared as interfering with his noble design than the want of patronage; but we are happy to learn that a marked improvement in his health has taken place within a short time, and that there is fair prospect of its complete restoration.

In relation to the plan of this agricultural college, Mr. Gowen informs us that all the details have not yet been determined on; but his design is to employ the ablest talent in the country as professors, and to make the course of academic instruction as liberal as that of any colleges in our land, for those who choose to avail themselves of a thorough classical education; while the students will be thoroughly grounded in practical mathematics, natural philosophy, &c., and withal imbued with a love of Rural life, and habituated in mind and body to its delightful pursuits.

The graduate of this college will not be the sickly and attenuated Book Worm merely, but the vigorous and intelligent Country Gentleman. Who is there that has given the least attention to the subject, is not convinced of the imperative necessity that exists for a radical reform in our systems of college education? And who is there that wishes well of his race and his country, that does not say God speed to this praiseworthy effort at the commencement of such a reform? We shall hail the opening of the Mount Airy College as an auspicious era in the history of our country, and the harbinger of great good, especially to the cause of agriculture.

We could say much more in favor of this glorious opening for the rising generation, and especially of the admirable FITNESS of the MAN and the PLACE for

the proposed institution; but we forbear for the present. In the mean time we submit the matter for the consideration of parents who value the health, happiness, and prosperity of their sons; and, also, to young men of spirit and enterprise, who wish to become thoroughly fitted for a position among the real nobility of our land. We should be gratified to learn that Ohio, our great and growing agricultural State, would furnish her proportion of students, should the college go into operation; and this we feel confident will be the case, for two or three have already been reported to us as ready to enter as soon as it is opened.

We would suggest that those desiring to send their sons, or to obtain further information on the subject, would do well to write directly to Mr. Gowen. His address is JAMES GOWEN, (Mt. Airy,) Philadelphia, Pa.—*Ohio Cultivator*.

**HARFORD COUNTY BLUE STONE LIME.**—If "C. H." a correspondent in our July No., will forward to us a specimen of the "Blue Limestone" of Harford County, of whose meliorating effects he speaks so favorably, we will have it analyzed by a competent Chemist, and give the analysis in our columns.

**PROLIFIC WHEAT.**—At page 48, Aug. No. of vol. 1, of the Farmer, notice is taken of a bunch of wheat, raised by R. E. C. Downes, Esq. of Dorchester Co., Md., consisting of 76 stalks from one grain—Mr. D. has, agreeably to our request, forwarded it to us, and as a curiosity, we have had it hung up in our Bookstore for the examination of the curious.

**SOOT AS A MANURE.**—The great value of soot as a manure may be very readily conceived from the following Analysis, by which it will be seen that it comprises alike the elements of nutritive and mineral manures.

Geine	30.70
Extractive matter and nitrogen	20.
Carbonate of lime & traces of magnesia	14.66
Acetate of Lime	5.65
Sulphate of Lime	5.
Phosphate of lime and iron	1.50
Acetate of Potash	4.10
Muriate of Potash	.36
Acetate of Ammonia	.20
Acetate of Magnesia	.53
Silex	.95
Carbon	3.85
Water	12.50
	100.

**THE DEGREE OF LIME ESSENTIAL TO THE GROWTH OF WHEAT.**—"I find by chemical examination of several remarkable soils, that a very minute quantity of carbonate of Lime, viz. from 1 to 2 per cent. is amply sufficient to render them capable of bearing heavy crops of good wheat. I am also satisfied that a soil is incapable of producing wheat of good quality if it does not contain carbonate of lime; for the substance is an essential ingredient of the grain.—CHARLES T. JACKSON."

**SEA WEED.**—Col. *Le Couteur*, of the Island of Jersey, so well known to agricultors by his experiments in the growth of wheat, uses sea weed as a manure for that grain, and has experienced the happiest results from its application,—the quantity of the grain being increased and its quality improved by it. This result will not be questioned by those who are aware that among the constituent elements of the sea-weed are the *muriate* and *sulphate of Soda*, *potash* and *lime*. Now then, as immense bodies of it are to be found along our sea coast and the streams emptying into the Atlantic, it should be an object with persons owning lands on those waters where it is periodically driven ashore, to make arrangements to avail themselves of it. Its effects are prompt; telling efficiently the first year, and extending its benefits to the second in an essential degree.

In Scotland, on its west coast, it has been used to great advantage, the value of the land being exchanged from 10 to 20 shillings per acre, per year. There it is usual to apply it every second year either in the fresh state or to mix it with farm yard manure. Where used in compost we should think that its value would be increased by adding to it either plaster or powdered charcoal, to prevent the escape of the volatile gases, which is ever consequent upon the decomposition of such bodies. Thus managed, we feel certain that its virtues might be continued much longer, as the ammoniacal portions of it would not so soon escape as when used without a fixing absorbent.

**DEAD ANIMALS.**—By covering a dead animal with five times its bulk of earth, that quantity might be converted into so much good manure, as the gaseous eliminations thrown off in the process of decomposition would be absorbed by, and become assimilated with, the superincumbent earth. How much more preferable such a disposition of a dead cow or horse would be, to leaving its carcass exposed on the surface, to fill the air with noisome vapors, we leave the farmer to determine.

So soon as the flesh may be decomposed, the soil should be removed from the bones of the animal, turned over, and mixed, say with half a bushel of plaster, to fix the ammonia, when it will be fit to use. The bones then should be broken fine, and have half their weight of sulphuric acid added to them, and covered up to digest, which they would do in a few weeks. When digested, they should be mixed with mould and spread on the soil. The bones of a horse or cow, thus treated, would efficiently manure a quarter of an acre of ground for turnips, and ensure a good crop, or might be applied, with similar good effects, to an equal quantity of land in corn, rye, barley, wheat, or oats, so that one dead horse or cow could be made to manure half an acre of ground.

**SHEEP SHEDS.**—We have repeatedly urged upon our readers the propriety of erecting sheds for the winter keep of their sheep, as well upon the score of humanity as upon that of economy. We have been

long since convinced that animals can be subsisted upon much less food when protected by cover from the cold and inclemency of the winter, by warm quarters, than when exposed in the open air. Casting theory aside, two recent experiments made in England, demonstrate the truth of our position so clearly, as not to leave a loop to hang a doubt upon.

The first is an experiment made by *Walbanke Childers, Esq.*, Member of Parliament. He had 40 sheep of equal size and weight selected: 20 were fed in the open field, the other 20 in a rough shed, yet the latter although they received one fourth less food than the former, showed an increase of twenty stone more in the short space of 4 months.

The second experiment, was made by *Lord Ducie*; 100 sheep kept in the open fields consumed 24 lbs. of Swedish turnips daily, each, while a second hundred, protected by a covered shed only consumed 20 daily, each.

The reason of this difference in the quantity of food consumed is obvious—the excess goes to keep up the animal heat, instead of being appropriated to the increase of flesh, muscles and fat.

**REARING OF CALVES.**—*Mr. Minot Thayer*, of Braintree, Massachusetts, raises his calves in this way, which he says do not cost him more than one-fourth as much as when he permitted them to run with the cow.

He prefers those calves which come in the fall or winter, takes them from the cow when three or four days old, prepares a strong tea from good hay, to which he adds a small portion of milk and a very little molasses. The calves drink it freely, and very soon become fond of it, and having got the taste will eat hay at three weeks old. As they increase in age, he decreases the quantity of milk. He gives to each calf as much tea in quantity as it would require of milk, twice a day with a few carrots cut up fine, and also as much hay as they will eat. The hay from which the tea is made is not lost, as it is given to the cattle, who consume it readily. He estimates the cost of raising a calf in this way, until it is ten weeks old at \$3, and remarks that the trouble is but trifling.

**EXCELLENT AGRICULTURAL RULES.**—*Falkner* lays down the following excellent rules, the which wherever the concurring circumstances will allow, it would be wisdom to carry out.

1. To increase the quantity of manure on a farm should be the constant aim of every farmer.

2. Hay should never be sold, unless two tons of stable litter are returned for every load sent off the farm.

3. The horse teams should be kept in the stables, and soiled during the summer and autumn on green food.

4. Every portion of apparently refuse vegetable and animal matter should be carefully collected and added to the dung heap.

## HORTICULTURAL.

### CLAIRMONT NURSERY.

We visited the above establishment a few weeks since, and spent a few hours very agreeably under the hospitable roof of its ancient founder, and in walking over his well arranged and extensive nursery. It is known to most well informed agriculturists, that it was established some 19 years ago by that excellent farmer and nurseryman, *Robert Sinclair*, Senr. and that under his management it has attained a reputation and celebrity no less well deserved than enviable.

The grounds devoted to the culture of fruit trees, spread over an area of some seventy acres; and it is not saying aught more than it deserves to state, that, in the present selection may be found every variety of native and exotic origin, whether designed for the luxury of the table, the ornament of the lawn, park or clump.

Time, which is no respecter of persons, has, in its course, laid his hand upon the venerable proprietor of Mont Clair; but though he does not now possess the physical energy which so distinguished him in youth, having called to his aid son-in-law, Mr. *Corse*, for several years a partner in the concern, has confided to him, the active superintendence and management of the nursery. Without intending to flatter this latter gentleman, in the least, we may remark, that a more judicious choice could not have been made, as to great industry and perseverance, he super-adds those other qualities so essential to success in horticultural pursuits—native sagacity, closeness of observation, a sound discriminating judgment, a conscientious love of justice and fair dealing—and withal, possesses a passion for his business. With these characteristic traits of character—animated by the ambition to excel—and counselled by Mr. S., it would, indeed, be “passing strange” if he should not find his way to the confidence of the public.

To judge of the graphic fidelity with which we have spoken of Clairmont nursery, and its proprietors, it is only necessary that those who desire to purchase, should visit and form their own opinions. Its proximity to our city—only 3½ miles distant—invite all who may wish to purchase, to pay it a visit. Half an hour's ride, over a good road, will bring them to the nursery, where a courteous reception awaits them—and where they will have a chance of enjoying as rich a treat as were ever presented to a Horticultural eye.

In our rambles through the forests of young fruit and ornamental trees, we could not but admire the beautiful, thrifty, and healthy, appearance of the thousands and tens of thousands of trees of every description, which met the eye—and we felt gratified that our vicinity could boast of an establishment which, in connexion with the extensive and well ordered agricultural establishments, in the city, precludes the necessity of the farmer and planter extending their visits to other states, for a supply of any article

which may be required on their estates. So far as valuable agricultural implements are concerned, Baltimore now stands pre-eminent—the genius evinced by her mechanics and machinists, has justly placed her in the front rank for the supply of all labor-saving machinery which is now required in the cultivation and preservation of crops—and the character which is now being attained by Messrs. Sinclair and Corse, and others in the Fruit, Ornamental and Flower and Seed Department, will give to Baltimore, the natural mart for the South and West, decided advantages over every other city. We earnestly appeal to our friends, to make a visit to these nurseries, when in our city, whether they wish to purchase or not—they will be amply repaid in those pleasant sensations which they cannot fail to experience, in beholding the beautiful scenery with which they will be surrounded, the delightful perfume from the acres of the most highly prized flowers, and in beholding the finely tilled fields of the farm attached to the nursery.

### OCTOBER GARDEN WORK.

Although from the lateness of the season, there is not much to be done in the Garden, we must not neglect it. Indeed devoted as we are by every feeling of our heart to whatsoever concerns the tillage of the earth, there are associations connected with the institution of the garden—as the first theatre of human labor designated for the occupation of man—as the peculiar spot where woman rules supreme—we say, these associations give to it such a preference in our feelings over every other portion of the earth devoted to culture as to either make us rejoice, when we see it skillfully tended and well cared for, or grieve, when we behold, the evidences in its condition, that its owner takes no pride in it. A homestead, however magnificent, without a well arranged and carefully cultivated garden, lacks, in our view, not only its brightest ornament, but its most rational sources of pleasure and comfort.

Thus thinking, we will endeavor to point out what should be attended to during this month.

**Cabbages.**—If, taking counsel by our advice, you sowed cabbage seed in August, you are now provided with plants to set out, with a view of securing a supply of early Cabbages for next summer's consumption, and we will, therefore, tell you how to set them out, so as to withstand the winter.

Select a good loamy bed, which lies dry, manure it well with strong stable dung, dig it up deeply with the spade, as the work progresses have it raked finely: the digging and raking done, stretch a line from east to west, throw up ridges 3 feet apart and 6 inches high, plant your plants 12 inches apart on the north side of each ridge, pretty low down on the ridge: this done, strew long horse dung along the south side of the ridge, about 3 inches deep. By pursuing this plan, at least 80 per cent. of the plants

will live through the winter. To prevent loss by the escape of ammonia from the manure, strew plaster or pulverized charcoal over it, pretty freely.

In the spring, as soon as the frost is out of the ground, haul down the earth of the ridges, so as to cover the manure over. This will be the first working—the others must be regulated by the necessities of the plants—you must bear in mind, that, in order to insure success in garden culture, cleanliness must be observed; neither grass nor weeds must be permitted to rear their heads—and that the soil must always be kept open to the influence of the atmosphere.

**Asparagus Beds.**—Cut off the stalks, let them lie on the beds until dry enough to burn, then fire them, and rake the ashes evenly over the beds. This done make a compost of 8 parts of well rotted stable dung and 2 parts ashes, mix them well together, spread it evenly over the beds, say, two inches thick, fork it in well, then rake, and finish by strewing salt over them, about the eighth of an inch in thickness. This treatment will ensure you an early supply of large asparagus next spring.

**Strawberry Beds.**—These should be cleaned, have the runners cut off, and receive a top dressing of thoroughly rotted stable manure, which must be put between the rows and not permitted to cover the vines.

**Horse Radish.**—Select a moist bed or border, manure it well, dig in the manure, a spat and a half deep, rake, manure again, dig it in 6 inches deep, rake and set your plants or roots 1 foot apart, in rows 2 feet asunder. Next spring hoe between the rows, keep the bed clear of weeds throughout the season, and you will secure to yourself one of the best and most healthful condiments of the table.

**Fruit and flowering Shrubs and Vines, as Gooseberries, Currants, Raspberries, Grapes, Roses, Snowballs, Honeysuckles, Lilacs, &c.,** may now be transplanted.

**Spinach and Lettuce** should be thinned out.

**Radish, Cress, and Lettuce** seed, may still be sown in warm borders, which should be previously enriched by a plentiful supply of manure.

**Broccoli.**—These should be hoed up, to enable them to withstand the frosts of winter.

**Garden Fruit Trees.**—These should be carefully examined, have all dead limbs cut off, and treated as we have directed for those in the orchard.

**Celery.**—See that your Celery is earthed up for blanching.

**Beets, Carrots, Parsnips, Potatoes.**—These roots should be dug, and carefully put away before the hard frost sets in. They may be preserved in a dry cellar, if covered with sand or straw, or buried in the open air, by being covered with a body of some 19 inches of earth. When buried out of doors, the mound should be cone-like, so as to convey the water off which may fall, from time to time, and have a ditch around each pile, so constructed as to carry off the water, it being indispensable to their preservation that they should be kept dry.

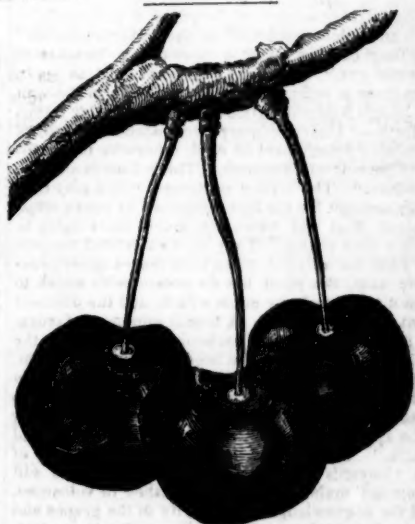
**Flower Bulbs.**—From the 15th to the last of this month is the time to plant out Tulips, Hyacinths, and such other bulbs as require autumnal planting. The beds should be manured with a compost consisting of well rotted stable manure and rich mould, in equal proportions.

**Rhubarb and Sea-Kale.**—The seeds of these vegetables should be sown during the early part of this month. If left out of the ground until spring, many of the seed of each would not vegetate. Be sure in purchasing the seed to get those only which are fresh and perfect.

**Shallots, Chives, Garlic, and Rocombale.**—The roots of these culinary herbs should be transplanted this month.

**Seed Onions** should be set out about the middle of the month. When planted in the fall they mature their seed much earlier than those which are planted out in the spring, and make better seed.

With this *memoranda* before her, every matron of a homestead will be able to give every necessary direction to her gardener, with respect to the operations in her garden during the month, and that she will faithfully attend to her duty we have every confidence; for if there be fidelity in human form, it is in woman.



#### THE BLACK TARTARIAN CHERRY.

With this fruit perhaps many of our readers are acquainted; but, in visiting different parts of the country, I have been surprised to find that this, with many other fine varieties, is entirely unknown. Notwithstanding the exertions made by Horticultural Societies to encourage the growth of good fruit, and by nurserymen to introduce the trees, there is still a great dearth of these, and much may be done to awaken public attention to the subject, by publishing in our leading agricultural journals, correct representations and accurate descriptions of their qualities and general utility. I have accordingly procured the loan

of a proof-sheet from Mr. Brown's work on Trees, treating of the variety or fruit in question, which I herewith present, hoping that it will elicit all the attention it deserves.

"BLACK TARTARIAN—known also by the names of *Circassian Cherry*, *Superb Circassian*, *Black Russian Cherry*, *Fraser's Black Heart*, and *Ronalds' Black Heart*. This variety is said to have originated in Spain, whence it was transmitted to Russia, and was carried from the last-named country to England, by the late Mr. John Fraser. In the account given of it, however, in the '*Pomona Londinensis*,' it is stated to have been introduced into Britain from Circassia, by Mr. John Ronalds, of Brentford, in 1794. It is distinguished for its large, obtuse-heart-shaped, shining purplish-black fruit, with an uneven surface, containing a rich, juicy, tender, purplish flesh. It differs from many other varieties in hanging in clusters, which enables it to be easily gathered. It is a cherry of great excellence, bears plentifully as a standard, and when ripe, which usually occurs early in July, it readily commands in market, double the price of the ordinary kinds. This tree is valuable also, not only for its fruit alone, but from its vigorous growth, spreading branches, and symmetrical form, it is well adapted for the purposes of ornament, and is well worthy of general cultivation."

ROBERT B. PARSONS.

Flushing, L. I., 3mo. 12, 1845.

*American Agriculturist.*

#### MILDEW IN GRAPES.

The blight or mildew of the grape is thus explained in an article published in the "*Horticulturist*." The fungi causing blight is caused by a "surplus of carbonic gas," which gas could not exist as such, were there a sufficient supply of potash in the soil. In Liebig's *Agricultural Chemistry*, the matter is thus set forth—"Under ordinary circumstances, a manure containing potash must be used, otherwise the fertility of the soil will decrease. This is done in all wine countries." The writer continues, "We may now easily account for the fact mentioned by your correspondent, that 'old vines are much more liable to mildew than young.' They have exhausted the potash from the soil, and when their leaves absorb carbonic acid, the plant has no potash with which to form a health salt, by union with it, and the diseased plant invites the fungi. A humid summer is favorable for the generation of carbonic acid, and hence the reason why the vines have been attacked this season. Soap suds is beneficial, as it contains potash.—The writer observes: "That wood ashes is one of the most beneficial fertilizers for the grape vine, giving it the appearance of extraordinary luxuriance and health." The great productiveness and longevity of the vineyards abroad, which are found upon soil composed mainly of the spent ashes of volcanoes, and the acknowledged superiority of the grapes and wine yielded at least by such soils, are manifest proofs of the value of ashes. If its application will ensure the cultivator against mildew, it is, as the writer observes, a discovery of no ordinary utility.—*U. S. Gaz.*

*To the Editors of the National Intelligencer.*

WASHINGTON, September 22, 1846.


Gentlemen: As the potato rot has produced some excitement of late, I take the liberty to draw your attention and that of the public to the following substitutes for that esculent, and also some facts and experiments in relation to the potato. In the year 1824 I returned from Chili in the United States ship Frank-

lin, and brought with me a small green bulbous root, about the size of a small marble: this I planted at Meridian Hill, and, in two years, it produced a fine blue nose potato. These are indigenous to Chili, and from which the potato was originally produced. I have no doubt in my own mind that the potato has actually run out, and unless the plant indigenous to Chili is propagated this vegetable will disappear.—The roots which I would propose to substitute for the potato are the yam, tara, and cassada. The yam is indigenous to the West Indies; the tara grows in the Sandwich Islands, Marquesas, and in South Carolina. These two bulbous roots are easy to cultivate, and are of much better flavor than the potato. I tried both the yam and tara, in 1832, in Virginia, with perfect success. The cassada grows in Peru and Chili, as low down as Patagonia. In Peru bread and a drink (intoxicating) are made from it. I have no doubt that any person who would import these vegetables and pay attention to them would soon reap great advantage by their introduction. These vegetables grow to about the size of a man's head. I have no doubt but some old book-worm may find out that these vegetables have existed from the creation of the world, and that there is nothing new in the above suggestions; but, as in my statement to you in a former note on *glass cutting*, I set the chemists to looking over their books, I hope some very learned botanical reader may give us a dissertation on esculents. Yours, with respect,

W. D. PORTER, U. S. N.

**POTATOE DISEASE.**—The London correspondent of the Boston Atlas writes, under date of August 18—

It is now a well authenticated fact that the potatoe crops in England and Ireland are already nearly lost, by the same disease that spread so widely last season. There is not a field in either country that is not either totally or partially blasted by this pestilential disease. The very *swine* will not eat the diseased potatoes, and yet the poor people are compelled to eat them or starve! Whenever this is the case a very fatal fever rages and sudden deaths occur. It is stated that diseased potatoes act upon the human frame as a slow poison, which eventually destroys life. In some villages, where blighted potatoes have been eaten, the English cholera prevails to an alarming extent, and the inference is that this diseased food produces the cholera. It is stated that on fields where *guano* has been extensively used the disease is more destructive to the potatoe.—Even the leaves of young and healthy trees have been affected where potatoes have been planted. They wither suddenly and fall off. The smell emitted from the fields is described as most offensive, and a kind of smoke arises from the ground, like a thick mist. What the legions of poor people in England and Ireland will exist upon it is impossible to say; unless government again purchases large quantities of Indian corn for their relief, they will be in a most deplorable condition.—Already in Ireland several large meetings have been held, by the suffering masses, for the purpose of stating their situation and devising some means for their complaints to reach the wealthy classes, and finally the government.

 The Cotton crop we think will prove to be short; in what degree, we have been unable to make up our mind, but we should think very far below an average product.

From the "London Illustrated News," received at the office of the American Farmer.

## THE POTATO MURRAIN.



FIG. 1.—THE POTATO PLANT.

Never was witnessed a more important result, springing from a seemingly insignificant beginning, than has been presented by the disease now ravaging

the Potato-fields of all quarters of the earth. No one could have imagined that a rot which appeared in this crop in the Island of St. Helena, in the year 1840, was the "small speck on the horizon" which would become the forerunner of a calamity as fatal to the Potato as Asiatic cholera to man; and still less that a few blotches on the leaves of this exotic plant were the heralds of political danger so extensive as to affect the whole commercial policy of England. Such, however, has been the course of events, and justifies our presenting our readers with some information on this singular subject.

The Potato plant is naturally found wild on the mountains of Chili, and perhaps of Peru, whence its cultivation has spread into surrounding countries. It, or a species very like it, also occurs in the west of Mexico, in the province of Mechoacan, in a perfectly wild state. The stories current of its being a native of Virginia are undeserving of credit. Its present name was given it in consequence of its resemblance to the *Batatas*, now called Sweet Potato, which had been previously brought to the notice of Europeans. The latter is a kind of Bindweed; but our Potato

belongs to the Nightshade order, and is poisonous in all parts except its tubers, which are what we eat.

In order to form a just idea of the nature of the Potato Disease, it is necessary that, in the first place, we should show how this plant grows, and reproduces itself.

If a Potato plant is dug up at this season it will be found to present such appearances as are shown at Fig. 1. There is in the first place the remains of an old Potato, or, as the farmers call it, *set* (a), from which all the growth has proceeded. Immediately rising from that is the main stem or haulm, and above the ground level are the leaves and branches. Among the former, will be found a number of green berries, about as large as musket balls: they are the potato-apples or plums (k) and are filled with seeds which nature provides to multiply the Potato. If the plant produced nothing more than has now been mentioned, it would be of no use to mankind, for all these parts are more or less poisonous. But it also pushes forth under-ground runners, which are a kind of branch, the ends of which swell out into great round or oblong bodies, which are filled with starch, and have the name of tubers. These (d and f,) which are vulgarly called roots, are very different from the real roots, (e), which are little threads, resembling hairs, and unable to swell out or form much starch in their inside. Every Potato plant is capable of producing many such tubers, and every tuber will bear to be cut into many pieces, each of which will become a new plant; and thus the quantity of produce which an acre of land will furnish, and the extent to which the crop may be easily propagated, are quite enormous. It is said that as much as forty thousand pounds weight of Potatoes has been obtained from an English acre of land; this would supply a man with ten pounds of food a day for nearly eleven years, if he could keep it; and hence has arisen the universal desire to cultivate the plant in all countries into which it has been introduced.

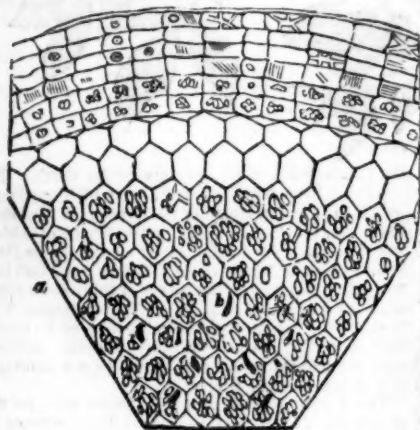


FIG. 2.

MAGNIFIED VIEW OF A SLICE OF A RIPE POTATO.

It now, however, seems as if Providence had determined to arrest its further increase, for it has been lately attacked by a new disease, the nature of which is unknown, which speedily destroys the hopes of the farmer, and some times even converts whole fields of Potatoes into a mass of corruption within a few

hours. What is very remarkable is, that the most healthy and vigorous Potatoe-fields are those which are destroyed most rapidly. Not a sign of the disease may be visible to-day; to-morrow the leaves may be seen withered, black, and half putrid; and the day after they are followed by the destruction of the stem. Generally, however, the evil is less rapid in its strides.



It first appeared in Europe in the east of Germany, about Midsummer, 1845; in a few weeks it spread over all the western parts of the Continent, extending even to the coast of Portugal, missing, however, the north-west of Spain, and not advancing so far as the Mediterranean. England was visited in the middle of August, and for sometime it was hoped that our cold northern climate would resist it; by degrees, however, it made progress, and was finally stopped only by the Highlands. In the meanwhile it reached Ireland, where, in the month of October, it had already done so much mischief that the British Government thought it necessary to send Commissioners to inquire into the facts, and to to consider what could be done to arrest the progress of this murrain: for it is believed that 4,000,000 of Irish peasants feed almost exclusively upon Potatoes, and the destruction of any considerable quantity of their only food could not be regarded otherwise than as a formidable national calamity. By the beginning of November, half the crop was estimated to have been destroyed, or rendered unfit for human food. On the Continent, the loss had even been more severe; so that, in many places, the export of food was prohibited; the Dutch and Belgian Governments were so much alarmed that they directed agents to purchase rice in London, and their operations were such as to double the price of that kind of grain in a single week.

What the amount of loss may really have been, it seems impossible to ascertain with accuracy or even probability. It has been estimated at £18,000,000 for the United Kingdom; Professor Lindley has computed it to have been £3,500,000 for Ireland alone.

Whatever the past fact may have been, it is certain that the injury sustained this year is very much

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more considerable, perhaps twice as great, for many new districts are attacked, no old ones are spared, & the destruction is in all cases more extensive.

The real cause of this sudden visitation is unknown. Some have ascribed it to the ungenial season of 1845, and that has been the prevalent idea;

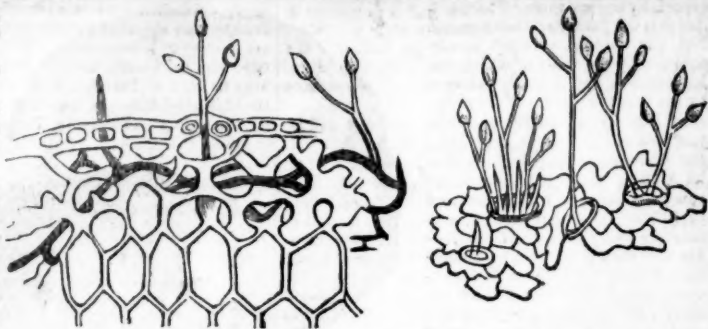


FIG. 4.—THE BOTRYTIS INFESTANS, VERY HIGHLY MAGNIFIED.

others have fancied that the life of the Potato is wearing out; many believe in electrical agency, and talk of blue lights seen at night playing over the doomed Potato grounds; insects, worms, parasitical fungi, night frosts, vegetable cholera, all have had in turn their advocates; and, as usually happens, those who have the smallest knowledge of the facts conceive themselves most capable of explaining the cause.

It is sufficient to say that none of the Scientific Commissions which have been issued by European Governments have ventured to pronounce any opinion on the subject; and the Editor of the *Gardeners' Chronicle*, in which the whole subject has, from the first outbreak, been most carefully discussed, still declares that the disease is beyond explanation.

But, although the cause is unknown, the symptoms have become too familiar. In all cases the leaves become black and soft, in roundish patches; and, quickly after, the tubers change here and there to a brown substance which resembles a decayed apple, and eats into their centre; in some instances, especially in warm, damp places, this is followed by putrid decomposition, accompanied by an indescribably offensive smell; in others, it is not more disagreeable than a rotten apple. It is very remarkable that this decay injures the starch in no considerable degree: so that, by mere grinding and washing, it may be extracted from the most decayed Potatoes, cleansed, and used for food. This led a noble Lord in the House of Commons, more remarkable for zeal than intelligence, to assert that a rotten potato had been changed into starch!

It is not, however, in the leaf that this curious disease really begins. Weeks before there is any sign above ground, the foundation of the mischief is laid, by the appearance of a brown blotch on the young stem, just above the old set. This is shown at fig. 1 (c), and invariably precedes every other symptom, as was first pointed out by Professor Lindley. The writer of this has examined hundreds of cases, without in any instance finding an exception to the rule. It seems as if the old tuber contained the germ of some affection, or some undiscoverable deleterious matter, which acted upon the young stem just after it began to push, and that this was by degrees communicated through the subtle tubers of the stem, and, by degrees, corrupted the juices of the leaves.

Be this as it may, the blotches of the leaves are instantly assailed by countless myriads of a minute parasitical plant called *Botrytis infestans*, similar to those which mildew corn and other crops, which seems to be as constant a follower of the Potatoe disease as the Jackal of the Lion. A very full account of this plant has been given by the Rev. Mr. Berkeley, of whose drawings in the Horticultural Society's Journal we have availed ourselves in the accompanying illustrations. When the blotches are first examined nothing perhaps will be seen; but if their underside is steadily looked at for a minute, especially when held a little obliquely, by degrees the eye will observe a minute grey mouldiness on the edges of the blotch,



FIG. 5.—DISEASED STEM, NATURAL SIZE.

especially beyond them. The mouldiness is the parasite; it has a spawn like a mushroom, which it insinuates among the cells of which the leaf consists, and it finally emerges by the breathing pores of the plant. (See Fig. 4.) In order to gain a just idea of this curious vegetable, the reader must imagine himself to be looking through one of those solar microscopes which are used in public exhibition rooms, and magnify everything enormously.—He will then perceive a green surface, which looks like a fair meadow, upon which rises a forest of trees with branches like glass, and every one of them tipped with a hollow glittering globe containing powder which escapes from time to time in a cloud. (Fig. 4.) The meadow is the surface of the leaf, the fruit is the parasite, the globe is its seed-vessel, the powder its seeds; while the largest dimensions of this marvellous creation are smaller than the finest cobweb.

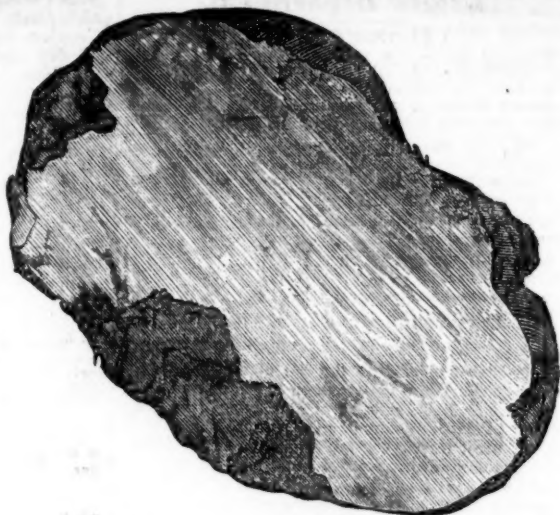


FIG. 6.—SECTION OF A POTATO, SHOWING THE DISEASE IN PROGRESS.

Some naturalists believe that this "parasite" causes the disease; all that we, however, can venture to say is, that it appears to be in some way or other connected with it. Acting upon that opinion, Professor Morren, of Liege, very early in 1845, recommended the stems and leaves to be pulled up and removed from the tainted fields; he thinking that if the parasite were removed, the tubers would not be injured by it. The practice has been to a small extent adopted in France and this country; and in the opinion of good judges, with decided advantage; we fear, however, that more experience must be had before it will be safe to recommend it as a certain cure. Should it prove to be so, it will not necessarily follow that the disease is caused by the fungus; it may only show that the presence of a diseased stem is likely to cause the tubers also to be tainted.

That the calamity, whose nature has thus been explained, must be productive of very great distress, will be admitted on all hands. We however, believe that it will be followed by greater advantages; for the plant, whose existence is thus threatened, is one of the most worthless of all known food: three-quarters of it are mere water and the other quarter is hardly able, of itself, to sustain animal life. The very facility of producing it has been a curse to Ireland, which all thinking men will be anxious to see removed.

#### EXPLANATION OF THE ILLUSTRATIONS.

FIG. 1. General view of the Potatoe Plant, its roots, leaves, tubers, and apples (or fruit); a, the old set or tuber; b, the first stem that is thrown up by a; c, the place where the disease first breaks out; d, the young tubers forming at the end of underground branches, resembling roots; e, true roots; f, full grown tubers; g, the same, diseased; h, the disease, as it first appears on the leaves; i, the blotches found at a later period on the stem; k, the apple, or real fruit, containing the seeds: this is also diseased.

FIG. 2. A magnified view of a slice of a small wedge of a ripe Potato, as seen under the microscope. It resembles honeycomb, the cells of which contain

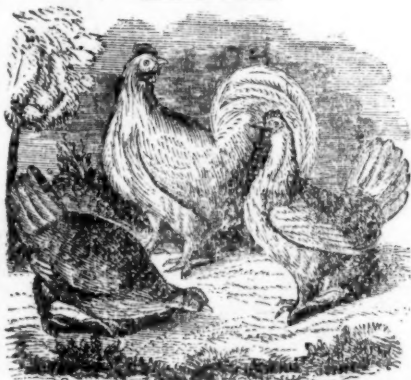
the starch, in the form of oval grains at a; at b, are seen little seedlings of the Potato *Botrytis*, just beginning to grow.

FIG. 3. The blotches on the Potato leaf, of their natural size. a shows the upper side, on which there is no mouldiness; b presents the under side, with white spots, which indicates the presence of the mould.

FIG. 4. The *Botrytis infestans*, very highly magnified, together with a bit of a leaf, out of which it is growing. Among the cells of the latter its spawn will be seen branching in various directions.

FIG. 5. A diseased stem, natural size, with the lower leaves dead, and the upper attacked by the disease. Here the blotches on the stem are running into the state of gangrene.

FIG. 6. The section of a Potato, natural size, showing the disease in progress.



JAVA BANTAM.—Here is a group of Java Bantams. They are of a white color, with feathered legs, and do not differ materially from such as are quite common the country over.—Am. Ag.

## Ladies' Department.

### FLORICULTURE.

Prepared for the "*A. Farmer*," by S. FEAST, Florist.

**Greenhouse Plants**—Not later than the first week, prepare to remove these to the green house or parlour—Clean and properly tie them up previous to setting them on the stand—Give abundance of air day and night, decreasing it as the weather becomes colder.

**Geraniums**—Top dress the old plants and pot off such cuttings as are rooted.

**Cactuses** should now be sparingly watered, except *Truncatum* and var., which will soon flower.

**Camellias**—If they need it should be repotted—Wash off all insects and syringe frequently. The seeds may now be sown.

**Verbenas** should be taken up and potted—Cuttings may still be put in.

**Peonies**—Now is the time to remove these with success.

**Carnations** should be potted.

Stocks should be attended to as directed last month; such as are in the open ground should be taken up and potted.

**Glanduloses, Jacobean Lilies, Tuberoses, and Tiger Flowers** should be taken up after the first frost.

**Oxalides** may yet be potted successfully—Hardy Lilies and Crown Imperials, should be planted this month.

**Chrysanthemums** in pots should be removed to the green house, and receive occasional supplies of liquid manure. Give as much air as possible to prevent their drawing.

**Tulips, Anemones, Ranunculuses, and other Hardy Bulbs** should be planted the latter part of the month.

**Hyacinths** may be planted the latter part of the month, in beds, in a light dry soil, in rows twelve inches apart and six inches from root to root in the row, or plant in pots 4 inches deep and 3 wide, in light rich soil. Plant the bulb so shallow that nearly one half will stand out of the soil. Plunge the pots in open air and cover them with 6 or 8 inches deep of light soil.

**Dwarf Rocket, Larkspur, Eschscholtzia, Flos Adonis, Clarkia, and a few other hardy annuals** may now be sown for early spring bloom.

**Dahlias** will now be blooming abundantly—After the first frost destroys their tops they should be taken up, labelled, and put away in the green house or cellar, for the winter.

### VERBENAS.—Description of three varieties.

In our several volumes have been given full descriptions of all the fine verbenas which have been produced from seed by our amateur cultivators, as well as some of the best which have been introduced from England; they number in all forty-eight kinds, upwards of twenty-five of which are now among the finest varieties cultivated, while the others have given way to new and more beautiful seedlings. In our volume for 1843, we described thirteen new varieties, since which period several kinds have been raised; but we have added only four to our collection which possess sufficient merit to be recommended for general cultivation. These four are already tolerably well known among amateurs, but as we wish our magazine to be a complete record of every new production, we add full descriptions of each.

**Royal purple.**—Flowers, rich, dark purple, with distinct, light purple eye; petals, smooth and flat; umbels, large, compact, and of good form; habit, moderately strong; foliage rather large. This variety is the nearest approach to a blue verberna, and is decidedly the best which has been raised; the color is not so rich as *Gazelle* or *purple perfection*, but its blue shade and lighter eye form a beautiful contrast, and render it a most desirable variety. It was raised by Mr. Samuel Feast, of Baltimore, who has been very successful in producing new sorts.

**Feast's Crimson.**—Flowers, rich, bright crimson; petals, slightly undulated and little starry; umbels, large, rather loose, and nearly flat; habit, vigorous and nearly erect; foliage deeply serrated, abundant and good. This variety was also produced by Mr. Feast, and is the best crimson variety we have seen. If the petals were smooth and flat, and the umbels more circular it would be difficult to surpass it.

**Feast's White.**—Flowers, white, slightly tinged with pearl; petals, large broad, nearly smooth, and slightly cupped; umbels, very large but rather flat; habit, tolerably vigorous, similar to *delicatissima*; foliage, light green and pubescent. It is slightly fragrant. This is the best white variety that has been produced; it has no pink or yellow tinge, as is the case with most of the white varieties, but inclines to a pearly shade, which always gives the flowers a clear appearance. A pure white, of good properties is yet a desideratum. This variety was also raised by Mr. Feast.

**Julia.**—Flowers, bright rosy pink; petals, very large, good form, nearly smooth, and little cupped; umbels, very large, loose, and rather long; habit, moderately vigorous and nearly erect; foliage rather narrow, slightly pubescent. Raised by Mr. Buist of Philadelphia, and is one of the best pink varieties we have seen; the color is very lively, and the large flowers, as well as large umbels, render it exceedingly showy. It is a great improvement over other varieties of similar color. *Hovey's Magazine.*

**IPOMÆA LEARII** as a summer flowering climber in the open ground. By the EDITOR of *Hovey's Magazine*.

Nothing can exceed the beauty of this species, the most brilliant of the *Convolvulus* tribe, when planted out in the ground and trained up in a pyramidal form. Its bright blue flowers are produced in the greatest profusion, hundreds being open at once, on a moderate-sized plant. No garden with a foot of spare ground should be without this most elegant climber.

The plants may be turned out at any time in June or July, and as soon as they begin to run, three stakes may be put up to each, in a triangular form, about a foot apart, and tied together at the top. On this the shoots should be carefully trained up; and so rapid is its growth that in a few weeks it will run to the top, and form a pyramid of foliage studded with azure blossoms, forming the most beautiful, as well as the most conspicuous, object of the garden.

Alderman Hall of New York, recently narrated his experience in the wine trade, having been in all the wine countries of the East, years ago, and become conversant with all modes of manufacture. Whatever the ripeness or sweetness of grapes, the Spanish and French wine makers bring up the saccharine measure by adding sugar to 11 by the sacchometer. It is then allowed to ferment at a temperature of 68 to 60°, and with the usual racking off and bottling, this is the whole secret of wine making. He had in this country taken assorted *Isabella* grapes, and by adding  $\frac{3}{4}$  lb. of sugar to a gallon, produced good hock wine; with 1½ lbs. to the gallon he made the wine which passed at the dinner of the American Institute for very superior imported wine. There is no wine brought to this country that has not about two gallons of strong brandy to each pipe. The Portuguese say this is not necessary to preserve the wine, but to suit the "hot mouths" of the English and American wine drinkers. The pure wines of Spain and Portugal are not intoxicating—it is rare to see a drunkard in that country, and they all drink copiously of wine.

Prof. Dewey said that fifteen years ago, Rev. Dr. Fish, near Newburgh, first proved the uselessness of alcohol to preserve wines by making several barrels of currant wine of good quality, some of which was sent to Georgia, where it kept perfectly good until used up.

[From Miss Beecher's Domestic Receipt Book.]  
A CHAPTER ON BREAD MAKING.

OVENS, YEAST, BREAD, AND BISCUIT.

**On constructing and heating an oven.**—The best ovens are usually made thus: After the arch is formed, four or five bushels of ashes are spread over it and then a covering of charcoal over that, then another layer of bricks over all. The use of this is, that the ashes become heated, and the charcoal being a non-conductor, the heat is retained much longer. In such an oven, cakes and pies can be baked after the bread is taken out, and then custards after them. Some times four bakings are done in succession.

The first time an oven is used, it should be heated the day previous for half a day, and the oven lid kept up after the fire is out, till heated for baking.

As there is so little discretion to be found in those who heat ovens, the housekeeper will save much trouble and mortification by this arrangement: Have oven wood prepared of sticks of equal size and length. Find, by trial, how many are required to heat the oven, and then require that just that number be used, and no more.

The fire must be made in the back side of the oven, and the oven must be heated so hot as to allow it to be closed fifteen minutes after clearing, before the heat is reduced enough to use it. This is called *soaking*. If it is burnt down entirely to ashes, the oven may be used as soon as cleared.

**How to know when an oven is at the right heat.**—An experienced cook will know without rules. For a novice, the following rules are of some use in determining: If the black spots in the oven are not burnt off, it is not hot, as the bricks must all look red. If you sprinkle flour on the bottom, and it burns quickly, it is too hot.

If you cannot hold your hand in longer than to count twenty moderately, it is hot enough.

If you can count thirty moderately, it is not hot enough for bread.

These last are not very accurate tests, as the power to bear heat is so diverse in different persons, but they are as good rules as can be given, where there has been no experience.

**How to know when bread is sour or heavy.**—If the bread is sour, on opening it quick and deeply with your fingers, and applying the nose to the opening, a tingling and sour odor escapes. This is remedied by taking a teaspoonful of saleratus for every four quarts of flour, very thoroughly dissolved in hot water, which is to be put in a hole made in the middle, and very thoroughly kneaded in, or there will be yellow streaks.

If the bread is light and not sour, it will, on opening it deep and suddenly, send forth a pungent and brisk, but not a sour odor, and it will look full of holes, like sponge. Some may mistake the smell of light bread for that of sour bread, but a little practice will show the difference very plainly.

If the bread is light before the oven is ready, knead it a little without adding flour, and set it in a cool place.

If it rises too much, it loses all sweetness, and nothing but care and experience will prevent this. The best of flour will not make sweet bread, if it is allowed to rise too much, even when no sourness is induced.

**How to treat bread when taken from the oven.**—Never set it flat on a table, as it sweats the bottom, and acquires a bad taste from the table.

Always take it out of the tins, and set it up end way, leaning against something.

If it has a thick hard crust, wrap it in a cloth wrung out of cold water.

Keep it in a tin box, in a cool place, where it will not freeze.

**Yeast.**—The article in which yeast is kept must, when new yeast is made, or fresh yeast bought, be scalded and emptied, and then have a salt spoonful of saleratus put in, and be rinsed out again with warm water. If it is glass, rinsing twice with warm water will answer. Junk bottles are best for holding yeast, because they can be corked tight, and easily cleansed.

**Potatoe Yeast.**—By those who use potatoe yeast it is regarded as much the best, as it raises bread quicker than common home brewed yeast, and, best of all, never imparts the sharp, disagreeable yeast taste to bread or cake, often given by hop yeast.

Mash half a dozen peeled boiled potatoes, and mix in a hand full of wheat flour, and two teaspoonfuls of salt, and after putting it through a colander, add hot water till it is a batter. When blood warm, put in half a teacup of distillery yeast, or twice as much potatoe, or other home-brewed. When raised, keep it corked tight, and make it new every often in hot weather. It can easily be made when potatoes are boiled for dinner.

**Home made yeast, which will keep good a month.**—

Four quarts of water, two hands full of hops, eight peeled potatoes, sliced, all boiled soft, mixed and strained through a sieve. To this add a batter, made one-third of Indian and two-thirds of rye, in a pint of cold water, and then boil the whole ten minutes. When cool as new milk, add a teacup of molasses, a tablespoonful of ginger, and a teacup of distillery yeast, or twice as much home-brewed.

**Home-brewed yeast more easily made.**—Boil a handful of hops half an hour in three pints of water. Pour half of it, boiling hot, through a sieve, on to nine spoonful of flour, mix, and then add the rest of the hop water. Add a spoonful of salt, half a cup of molasses, and when blood warm a cup of yeast.

**Hard Yeast.**—This is often very convenient, especially for hot weather, when it is difficult to keep yeast.

Take some of the best yeast you can make, and thicken it with Indian meal, and if you have rye add a little to make it adhere better. Make it into cakes an inch thick, and three inches by two in size, and dry it in a drying wind, but not in the sun. Keep it tied in a bag, in a dry cool place, where it will not freeze.

One of these cakes is enough for four quarts of flour. When you wish to use it, put it to soak in milk or water for several hours and then use it like other yeast.

**Rubs, or flour hard yeast.**—This is better than hard yeast made with Indian.

Take two quarts of best home-brewed yeast, and a tablespoonful of salt, and mix in wheat flour, so that it will be in hard lumps. Set it in a dry warm place, (but not in the sun,) till quite dry. Then leave out the fine parts to use the next baking, and put up the lumps in a bag, and hang it in a dry place.

In using this yeast, take a pint of the rubs for six quarts of flour, and let it soak from noon till night. Then wet up the bread to bake next day.

Brewer's and distillery yeast cannot be trusted to make hard yeast. Home-brewed is the best, and some housekeepers say the only yeast for this purpose.

**Milk yeast.**—One pint of new milk, and one tea-

spoonful of fine salt, one large spoonful of flour, mix and keep it blood warm an hour. Use twice as much as the common yeast. Bread soon spoils made of this.

**Wheat bread of distillery or brewer's yeast.**—Take eight quarts of flour and two of milk, a tablespoonful of salt, a gill and a half of distillery yeast, and some times rather more, if not first-rate. Take double the quantity of home-brewed yeast.

Sift the flour, then make an opening in the middle, pour in a part of the wetting, and put in the salt. Then mix in a good part of the flour. Then pour in the yeast and mix it well. Then add the rest of the wetting, using up the flour, so as to make a stiff dough. Knead it half an hour, till it cleaves clean from the hand.

This cannot be wet over night, as, if the yeast is good, it will rise in one or two hours.

Some persons like bread best wet with water, but most very much prefer bread wet with milk. If you have skimmed milk, warm it with a small bit of butter, and it is nearly as good as new milk.

You need about a quart of wetting to four quarts of flour. Each quart of flour makes a common-sized loaf.

**Wheat bread of home-brewed yeast.**—Sift eight quarts of flour into the kneading tray, make a deep hole in the middle, pour into it a pint of yeast, mixed with a pint of lukewarm water, and then work up this with the surrounding flour, till it makes a thick batter. Then scatter a handful of flour over this batter, lay a warm cloth over the whole, and set it in a warm place. This is called sponge.

When the sponge is risen so as to make cracks in the flour over it, (which will be in from three to five hours,) then scatter over it two tablespoonsful of salt, and put in about two quarts of wetting, warm, but not hot enough to scald the yeast, and sufficient to wet it. Be careful not to put in too much of the wetting at once.

Knead the whole thoroughly for as much as half an hour, then form it into a round mass, scatter a little flour over it, cover it and set it to rise in a warm place. It usually will take about one quart of wetting to four quarts of flour.

In winter, it is best to put the bread in sponge over night, when it must be kept warm all night. In summer, it can be put in sponge early in the morning, for if made over night it would become sour.

**Baker's Bread.**—Take a gill of distillery yeast, or twice as much fresh home-brewed yeast, add a quart of warm (not hot) water, and flour enough to make a thin batter, and let it rise in a warm place all night. This is the sponge.

Next day, put seven quarts of sifted flour into the kneading tray, make a hole in the centre, and pour in the sponge. Then dissolve a bit of volatile salts and a bit of alum, each the size of a hickory nut, and finely powdered, in a little cold water, and add it, with a heaping tablespoonful of salt, to the sponge, and also a quart more of blood-warm water.

Work up the flour and wetting to a dough, knead it well, divide it into three or four loaves, prick it with a fork, put it in buttered pans, and let it rise one hour, and then bake it about an hour. Add more flour, or more water, as you find the dough too stiff or too soft.

A teaspoonful of saleratus can be used instead of the volatile salts and alum, but it is not so good.

☞ A valuable article on the way to analyze soils is unavoidably deferred.

## MONTGOMERY COUNTY AGRICULTURAL SOCIETY.

THURSDAY, Sept. 10th, 1846.

The society met pursuant to adjournment. The President opened the proceedings by an appropriate and forcible address, and in concluding his remarks, introduced to the audience Mr. BENJAMIN HALLOWELL. Mr. Hallowell then addressed the assembly in an instructive, learned, and elegant lecture. The audience was variously estimated from fifteen hundred to two thousand persons. After the addresses, the several committees reported as follows.

The Committee on Horses, beg to be excused from reporting at this time; because of the sudden illness of their chairman.

**Sheep.**—The Committee on Sheep award certificates of excellence, as follows: for best Buck, to A. B. DAVIS; best lot of Ewes, to JOHN P. C. PETER; best lot of Lambs, to E. J. HALL; best buck Lamb, to A. B. DAVIS.

**Cattle.**—The Committee on Cattle award certificates of excellence as follows: For the best Durham Cows and Heifers, to JOHN P. C. PETER, and favorably notice a pair of Steers, crossed with the common breed. For the best cross of Devon and common stock, to A. B. DAVIS; best young Bull, and four Heifers, Devon Stock, to JOSEPH BAILEY; the best pair of Work Oxen, to WM. G. ROBERTSON; and further report that SAMUEL ELICOTT, Jos. T. BAILEY and WM. G. ROBERTSON had, each, a pair of very superior Oxen, not reared in the county.

**Poultry.**—The Committee on Poultry award a certificate of excellence to SAMUEL T. STONESTREET for a lot of the best Geese; and favorably notice a lot of Geese exhibited by JULIUS WEST, being a cross of the wild and tame geese.

**Hogs.**—This committee has made no report.

**Agricultural Implements.**—The Committee on Agricultural implements award as follows: to FITZHUGH COYLE, patentee of Ruggles, Nourse and Mason's three horse plough, a premium of \$5.00; to LAWRENCE LYDDANE, for the best two horse Plough, \$5.00, being the Minor & Horton-plough; to CALED STABLER, the best ploughman, \$2; to SANDY, the next best ploughman, \$2; to Mr. STRONG, of Pa., for the best Wheat Fan, \$2; to FITZHUGH COYLE, for the best Corn-sheller, \$2; to do. for the best display of Agricultural Implements, \$5. Many other articles of ingenious design, and excellent construction were exhibited.

**Household Manufactures.**—The Committee on Household Manufactures award as follows: to Miss ELLEN DAWSON, the premiums for the best pair of Blankets; for the 2nd best, do; the best Counterpane, do; for the second best do. to Mrs. ANNA E. THOMSON; the best piece of table diaper, to Miss ELLEN DAWSON; the best piece of towelling, to Miss URSULA WILCOXEN; best piece of Flannel, to Miss S. A. DESELM; best piece of striped Linsey, Miss ELLEN DAWSON; best piece of carpeting, do; best hearth rug, Miss SUSAN DAWSON; best piece of plain linen, Miss ELLEN DAWSON; best pair of yarn stockings, Miss M. A. WILCOXEN; best pair of cotton do., Miss ELLEN DAWSON; best pair of thread do. do., best sample of Butter, Mrs. HY. HENDING. Bachelors premium for best made suit of gentleman's clothes, (Coat, Vest, & Pants) Miss ELLEN DAWSON.

And upon motion, it was unanimously resolved that BENJ. HALLOWELL be invited to become an honorary member of this society.

Resolved, That this society tender their most cor-

dial thanks to BENJ. HALLOWELL for his enlightened and intellectual lecture; and that they deem it a most favorable augury of the future success and usefulness of this association, that its first annual meeting was distinguished by such an address.

Resolved, That Mr. Hallowell be respectfully requested to furnish a copy of his address for publication.

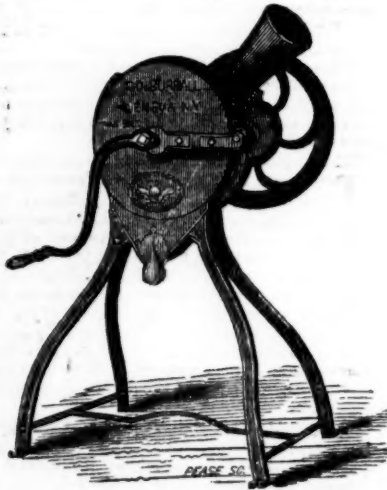
Resolved, That the society are greatly indebted to their President for his able address, and for the impartial and dignified manner in which he has discharged the duties of his office.

Resolved, That the society fully appreciate the compliment paid them by the elegant manner in which Mr. S. T. STONESTREET and Mrs. ELIZABETH WOOTTEN adorned their speaker's stand with a choice collection of flowers of rare beauty, tastefully arranged.

Resolved, That the newspapers of this place, and the American Farmer of Baltimore, be requested to publish these proceedings, and that the society stand adjourned to the first Wednesday of Nov. Court next. The society received an accession of 60 members.

W. VEIRS BOUIC,  
Recording Secretary.

#### DESCRIPTION OF BARRELL'S PATENT CORN SHELLEK.



This machine is a valuable invention. It shells about one-third faster than the common Vertical Iron Corn Sheller, and worked by one hand with a reduction of about 50 per cent. of power; the construction is remarkably simple and strong.

As will be seen by the cut—the ear of corn is introduced at the upper spout and the grain passed out at the lower spout. The cob which is separated from the corn, passes out at the hole on the side of the machine.

Messrs. R. Sinclair, Jr. & Co. of this city have the exclusive right to manufacture the article in Baltimore, and are prepared to fill all orders which may be passed through the agency of this office or direct to their agricultural warehouse, No. 62 Light-street. Price \$16.

**DEATH OF COL. McDONALD.**—The Columbus Enquirer, announces the death of Col. Alexander McDonald of Edaula, Ala. on the 16th ult., and very properly adds:

"Few men had contributed more to elevate the profession of the planter, or inspire with proper views of their importance, in the great social system, the substantial yeomanry of the country. In every laudable effort to improve the soil and add to its productiveness, he was ever found foremost, laboriously investigating and practically testing the suggestions of others, whilst his own good sense and sound judgment furnished materials for others to work out important agricultural results. Such a man was, in the broadest sense of the term, a public benefactor, and his death will be felt as a national calamity."

#### Baltimore Markets, September 29.

Sales of Coupons at 74a76, full supply—Coffee, Rio, sales of 3500 bags at 6 5-8a71—Herrings, stock light, sales at 4.37a4.50, an advance—Mackerel, in good demand at \$5.25 for No. 3, and 5.75 for South. 7 for No. 2, and 10.50 for No. 1—Feathers, fair to good, 25a30c per lb.—Flaxseed, \$1.12a per bu.—Timothy Seed, \$2.50a3—Cloverseed, not much doing—Peas, 75c per bu. supply small—Beans \$1.20a1.25—Hops 16c—Molasses, P. Rico, 26a29—Pork, Western mess and prime \$10.50a8 50—Western Beef 9.50 for mess, 6.75a7 for No. 1, and 5a5.50 for prime—Bacon, West. shoulders 34a4; sides, 5 5-8a5 3-4; assord 54; Hams, all grades 54a8—Lard, in kegs, 7c; in bbls. 64a6 3-4—Butter, West. in kegs 8a10, in bbls. 74c—Cheese, East. 8a8½ for com., 10c for shipping; in boxes 71—Sugar, stock much reduced of N. O. and prices well maintained, at 7a7.62 for good and prime, 7.75 for choice; P. Rico 7.50a8 for com. to prime quality. Hav. white \$9—Wool, quite dull and no transactions to note—Whiskey, in bbls. 24, in bbls. 25a26; wagon price of bbls. is 20c. exclusive of barrels—Tobacco; the demand has been good for the last week; infer. and com. Md. \$1.50a2.50, mid. to good \$3a5.50, good \$6, and fine 7a12; Ohio has also been in good request, and a large quantity has changed hands, tho' the transactions shew no improvement in prices; we quote common to mid. Ohio \$1.50a3.50, good 4.50a6; fine red and wraperry 10a12; the shipments during the last week have been very large, but the amount thus abstracted appears to make but little perceptible difference in the well filled warehouses—the inspections for the last four weeks comprise, Md. 4840 hds. Ohio 3193, Ky. 1—total 8034 hds. Cattle, 690 head off'd today, and all taken but 15, at a small advance over last week's prices, viz. \$2a2.75 per 100lb. on the hoof, equal to \$4a5 25 net, averaging \$2.40 gross—Hogs, live, in full supply at \$4a4.62 for ord. to good—Flour, Howard street \$4.62; City Mills 4.75, holders firm; dealers waiting for the next steamer, now due and momentarily expected. Wheat, fair to good Md. and Va. reds 90a100; prime parlels if in market would bring more—family flour white wheats 110a125—Corn 62a74 for both white and yellow—Oats 32c.

# METEOROLOGICAL TABLE, FROM 28TH AUGUST TO THE 28TH SEPTEMBER.

Kept at Schellman Hall, near Sykesville, Carroll co. Md.  
Taken at 6 o'clock, a. m., 2 o'clock, noon, and at 6 o'clock, p. m.

Wind.		Temperature		Remarks.			
28	S E	W	68	78	75	Fog	Shower Cloudy Clear
29	S	S	69	80	76	Fog,	Clear
30	W	W	67	81	75	Fog	Rain 3-4 in Clear
31	W	W	66	84	79		Clear
1	W	W	70	83	77		Fog Clear
2	W	W	68	84	82		Clear
3	W	S	72	85	75		Clear
4	SW	SW	73	87	79	Cloudy	Shower 1-4 in
5	W	SE	74	88	83		Clear
6	W	W	75	89	85		Clear strong breeze
7	SW	SE	73	85	79	Fog	Clear
8	SE	SE	68	85	75	Fog	Clear
9	E	E	70	75	68		Clear
10	NW	E	54	68	68		Clear Cloudy
11	E	E	61	71	70		Cloudy
12	W	W	68	83	78	Fog	Cloudy Clear
13	NW	NW	66	83	80	Fog	Cloudy Clear Rain 1-2 in.
14	W	W	70	85	80		Clear
15	W	NW	74	89	74		Clear
16	NW	NW	68	70	66		Clear
17	W	SW	SE	50	70		Cloudy
18	SE	W	N	63	73	Rain	3-4 in Cloudy Show'r 1-10 in.
19	W	W	N	60	73		Clear
20	W	W	S	54	75		Clear
21	W	W	W	57	77		Clear
22	W	W	W	57	70		Clear
23	W	S	S	50	75		Clear,
24	SW	SW	NE	58	79		Clear
25	SW	SW	SW	60	81		Clear
26	W	W	W	66	69	Showery	Cloudy, Clear,
27	W	W	W	51	70		Clear
28	W	W	N	48	68		Clear

## PLOUGH!!



The subscriber is manufacturing Ploughs of various patterns and of different sizes; also Wheat Fans, Cylindrical Straw Cutters, Corn and Tobacco Cultivators, CORN SHELLERS, &c. Also,

**THRASHING MACHINES AND HORSE POWERS**—these latter are used by the following gentlemen, to whom reference is made, as to their superior value, viz. Messrs. S. Beard, T. Beard, Dr. Watkins, T. J. Hodges, T. Welsh, W. Maekall, J. Iglehart, A. Sellman, W. Hopkins, J. Kent, G. R. Gailther, all of Anne Arundel county; and to Messrs. R. B. Chew, J. V. Barber, W. Boswell, G. W. Weems, and Z. Howes, of Calvert co. Md. Those wishing to examine the above articles are invited to call at my establishment in Gillingham alley, entrance from Howard st. 4 doors from Pratt st. Baltimore.

mh 1

CHAS. H. DRURY.

**EZRA WHITMAN'S WROUGHT IRON RAIL-WAY Horse Power and Thrashing Machine**, of which more than one thousand are now in use—and as this is the only Horse Power or Thrashing Machine that has given general satisfaction, I take pleasure in giving a short description of it, with a list of prices.

1st. The frame of the Horse Power is made with five posts, on either side, and as many cross girths bolted together with wrought iron in the most substantial manner.

2d. The Rail-way, guides, circles, and all the connecting and fastening irons, are made of wrought iron, instead of cast iron.

3d. The gearing is at the end of the Power, where it is not affected by the wear, or liable to be broken by wild or false horses.

4th. It being made of wrought iron, there is no difficulty in giving sufficient width for the horses to travel with ease, and no more rods, wheels or fastenings in the two horse power, than in the one horse power.

For Farmers wishing to purchase, will be particular to observe the above, as the great success of my machine, may bring others, of inferior construction, into our market.

I have the pleasure of referring to either of the following named gentlemen farmers, residing in the immediate vicinity of Baltimore, who have purchased my Horse Power and Thrashing Machine the past season, and who will no doubt be willing to give information respecting their utility,—viz: Jesse Slingluff James Swan George Harryman Jacob. Forney William Gent Daniel Bowly Thomas J. Talbott Owen Cecil A. M. Johnson Joseph Parks George Jenkins Charles R. Barney Frederick Harrison John Rider Samuel Hutton

The cash prices for these articles are as follows, viz:

For Two Horse Power, \$100.—For One Horse Power, \$75.—with an additional charge for extra long shaft and extra pulley, \$5. For Thrasher which thrashes and cleans at one and the same operation, \$100. For 24 inch Thrasher, with new im-

provement, \$50—90 inch do. with do., \$45—16 inch do., \$40. The prices of common Thrashers vary from 25 to \$35.

EZRA WHITMAN, Jr.  
No. 55 Light street near Pratt.

April 1



## AGRICULTURAL MACHINERY, IMPROVED PLOWS, &c.

The subscribers avail themselves of this medium to tender their thanks to their friends and the public generally, for their liberal patronage, and in support of their claims to its continuance, they offer to supply a general and complete assortment of the best AGRICULTURAL IMPLEMENTS and SEEDS, that can be procured—and upon terms which furnish a reasonable and liberal guarantee of satisfaction to purchasers.

sep 1

R. SINCLAIR, JR. & CO.

**AGRICULTURAL IMPLEMENTS** for sale at No. 7 Bowly's wharf, Baltimore, by Wm. GAWTHROP & SON.

We offer to Farmers and Planters our Premium Double Corn Shellers, which have proved themselves to be the very best now in use—we have on hand one of the best selections of PLOWS in the state, the castings of which are the composition metal, with chilled heels, points and edges; our plows embrace the Minor & Horton from 6 inch. to 12, so much used in the North; it is one of the lightest draught plows in use—we have the Wiley improved, and the old pattern of the N. York manufacture, which is known without comment. Also, the Prouty, Chenoweth, Self-sharpening, Davis, and all other kinds; Plow Shears and Points for all kinds of Plows; Fans, Straw Cutters, Corn and Cob Crushers, and all other kinds of Implements used in farming—we also keep all kinds of Field Seeds—we do a general commission business in Grain, Seeds and Country Produce.

Fe

The "Simon pure," and invincible WILEY PLOW still in the field—A. G. MOTT, at No. 38 ENSOR STREET, near the Bel-Air Market—Manufacturer and Vender of Implements of Husbandry, viz. Plows, Harrows, Cultivators, Grain-Cradles, Wheat-Fans, Corn-Shellers, Straw-Cutters, Endless chain Horse Powers, Thrashing Machines, &c. &c.—through this medium, would appraise the agricultural community of the fact, that he is the only manufacturer in the "Monumental city" of the GENUINE WILEY PLOW (right and left hand) composed of the real "Simon pure" and justly celebrated New York composition, chilled castings, the points of which, are warranted to stand the most rugged soil equal to steel, at a cost of about two cents per acre, for blacksmith's bill.—If you are for bargains, call, or send your orders, for he guarantees his Implements good as the best, and cheap as the cheapest, for Cash, and delivered in any part of the city free of charge.

**AGRICULTURAL IMPLEMENTS—LABOR SAVING MACHINERY.**—GEORGE PAGE, Machinist & Manufacturer, Baltimore. West of Schroeder st. Baltimore, is now prepared to supply Agriculturists and all others in want of Agricultural and Labor-saving MACHINERY, with any thing in his line. He can furnish Portable Saw Mills to go by steam, horse or water power; Lumber Wheels; Horse Powers of various sizes, ranging in price from \$85 to \$200, and each simple, strong and powerful. His Horse Power & Thrashing Machine, he is prepared to supply at the low price of \$125 complete; the Thrashing Machines without the horse power, according to size, at \$30, 40, 65 and \$75; Improved Seed and Corn Planter, Portable Tobacco Press; Portable Grist Mills complete, \$125.

**PLOUGHS AND PLOUGH CASTINGS.**—J. S. Eastman, at his old stand, Pratt street, has for sale a good assortment of Ploughs, suitable for fall ploughing, viz: Davis' Improved 9 inch, and 9 inch Improved cast and wrought shears, do. do. 10 inch, do 12 inch or 3 horse.—Also, my Patent Cleary self-sharpening Ploughs, 9, 10 and 12 inch—also, 10 inch Cleary's 2nd Improved Plough—and Snyder's Patent Ploughs, 10 inch right and left hand.—The same Plough works at pleasure, a wrought bar-share, or a cast share, thus easily suited to different soils—also on hand a large stock of Plough castings of various Patterns at wholesale and retail, together with Horse Powers, Thrashing machines, Harrows and Cultivators, and his Patent Cylindrical Grist Cutters, &c. &c., all at reduced prices—also, Landreth's Sarden Seeds will be furnished to Gardeners by the pound, &c. 1

## AGRICULTURE.

The Subscriber will be prepared to furnish the agriculturists with every kind of SALT or COMPOST, required by the different kinds of grain or vegetables, by the large or small quantities, with directions for their applications. Soils visited and analysed by the year or by the single analyses and opinion.

W. BAEL, Agricultural Chemist,  
No. 2 N. Liberty st., Baltimore.



### NOTICE.

#### CLAIRMONT NURSERY, Near Baltimore, Md.

We again take pleasure in notifying our various customers and the public, that the time has nearly arrived for transplanting Trees, &c., and consider our stock of fruit trees superior to what they have ever been before both in quality and in quantity, as we have had an opportunity of testing their correctness from our standard Trees which are extensively bearing.—We deem it unnecessary to enumerate the various kinds of fruit and ornamental Trees, Shrubbery, Roses, Green House plants, Flower roots, &c. &c., suffice it to say our Nursery and Seed Garden occupies about 100 acres of the Farm, and our determination is to give satisfaction if possible, both in price and quality.—printed Catalogues, giving our prices, will be sent gratis; where large quantities are wanted considerable discount will be made. Letters addressed to R. Sinclair, Jr. & Co., Light St., Baltimore, or the subscribers, Balto. Md. will meet with prompt attention.

Persons wishing to act as Agents will please let us hear from them.

Oet 1 SINCLAIR & CORSE.

**FRUIT AND ORNAMENTAL TREES, &c.**—The subscriber has made arrangements by which he is enabled to supply, with promptness, all orders for FRUIT & ORNAMENTAL TREES, and believes he can, with all confidence, recommend them to his friends, as equal at least, to any to be had from any nursery in the U. S. and at prices equally as low as any of similar sizes, kinds and qualities:



Apple Trees, a large variety, at 25 cts each for 12 or less; over 12 and less than 50, 20 cts; or \$18 per 100  
Pear do. a very fine assortment, 37 c. each; some rare kinds 50  
Peach do. a very large stock and great variety, 25c each for 12 or less; 18 c each, over 12 and less than 50; and \$15 per 100  
Plums, the choicest varieties, 50c each  
Cherries, 37 to 50c each, many sorts, some very fine  
Apricots, \$4 per doz; per 100, 15 per ct. off  
Nectarines, 37c each, or \$25 per 100  
Almonds, 25 to 37c each—Quinces 37c each or \$3 per doz  
Currants, 20c each, \$2 per doz. or \$10 per 100  
Raspberries 6 to 20c each; 10c3 per doz; 6to\$15 per 100  
Figs, 50c each—Gooseberries 30 to 25c; or \$3 per doz  
Walnuts, Chesnuts, Filberts and Hazelnuts. 25 to 50c each  
Strawberries, fine sorts, 10c3 per 100; or 25 to 50c per doz  
Whortleberries, Cranberries, Grapes, Scions  
Hardy Ornamental Forest Trees, Shrubs, Evergreens, Vines and Creepers, twining and upright Honeyuckles  
Roses, a great variety; Chrysanthemums, Fæonies  
Dahlia, a splendid assortment; Pinks, Hydrangias, Geraniums  
Esculent Roots, bulbous and tuberous rooted Plants, &c.

They will be packed and labeled by experienced hands, and delivered at any of the wharves or rail road depots in the city. A small charge will be made for packing.

S. SANDS,

Office of American Farmer, 122 Baltimore st.

**Who keeps on sale a general assortment of GARDEN SEEDS, Books on Agriculture, Horticulture, Floriculture, on Cattle, Horses, Sheep, on Guano, and other Manures, &c. o 1**

**A SITUATION** is wanted for a German, who has been accustomed to farm work and the management of horses, and who is well spoken of by his present employer, who having no further use for his services, is anxious to see him provided with a home.—Apply at this Office. Oet 1

**WANTED, 30 or 40 good EWES, to breed from; crosses of some improved breed on the native, would answer—or good young native Ewes. Also, a good brood Sow. For Sale a fine young AYRSHIRE BULL, a few weeks old—price \$12. Apply at this Office.**

Also, a Buck, 1 year old, got by a full bred South Down Buck, bought of Mr. Bennett, of Albany, and out of a half-bred Bakedwell, or Leicester ewe.—Price \$12, delivered in Baltimore. Also, a South Down Buck, with a small cross of Leicester, a very fine animal.—Price \$20. Apply to S. SANDS, office of the American Farmer. ocl 1

**BOMMER'S METHOD FOR MAKING MANURE**—The subscriber has been appointed by Mr. Bommer, his agent for the Southern States, and will dispose of the Books, with the right to use them, for any sized farm, at 65 each. Address (post paid) and S. SANDS, office of "A. Farmer."

**THE SUBSCRIBER** takes pleasure in returning thanks to the many gentlemen who have favoured him with their **MILL-WORK**; also to the farmers and planters for their liberal support in the Machine line, and would respectfully inform them, that his endeavors to please will continue unremitting. He is prepared at all times to build any of the following kinds of MILLS.—Overshot, Pitch Back, Breast, Undershot, Reacting, Steam, Wind, Tide, Horse-power, or Tread Mills; and having the best of workmen employed at pattern and machine making, he can at all times furnish the best articles at the lowest prices, such as Horsepowers, Pettigrew Shelters, Murray's Shelters, 4 kinds hand and power Shelters, portable Mills adapted to any power, Corn and Cob grinders, Straw, Hay and Fodder Cutters, Carry-log and Mill Screws; also manufactures Hoisting Machines, Hoisting Cranes, File Drivers, Turning Lathes and Steam Engines; and any kind of Machine, Model or Mill-work built to order. Any kind of Castings and Smith-work at the lowest prices. I warrant all Mills planned and erected by me to operate well. JAS. MURRAY,

Millwright, York near Light st. Baltimore.

He has also for sale, the following second hand Machinery: 1 8-horse Steam Engine and Boiler, 2 pair 4 ft 6 in. French burr Millstones, with all the gearing; 2 pair 3 ft 6 in. French Burr Millstones, with all the gearing; and some Saw Mill work—the whole are good, and any or all of the above will be sold low. ocl 1

"Spade labour, the perfection of good husbandry."

PULVERIZA-  
TION.



DECOMPOSI-  
TION.

**THE "PREMIUM PLOUGH"**—In PROVY & MEARS' No. 5 1-2, "confessedly the best PLOUGH known in this country for beauty of work and pulverizing the soil," we have combined the most perfect swing as well as wheel Plough, connected also with the principles of self-sharpening and counter-draught, which with the facility of turning it into a Tandem 2, 4, or 3-horse abreast Plough in a minute of time, renders it the *N. PLU ULTRA* of perfection. During the past season it received the first premium for the *BEST PLOUGH*, at Philadelphia; a first, second and third premium at New Castle county, Del.; the Imperial Medal of Russia, of massive gold, value \$300; and at Prince George's society, Md. the highest testimony of approbation, in not permitting it to compete, having already received the first premium as "the *BEST PLOUGH* for general purposes." Their one-horse Plough No. 2 1-2, is strongly recommended for light soils and horticultural purposes, being built after the same model, self-sharpening, and carrying a sod furrow 10 in wide with great ease and precision.

For sale at No. 55 LIGHT st. Baltimore, MA. EZRA WHITE MAN being appointed sole Agent for sales in Baltimore and vicinity. Fe 1

**FARM MANAGER**—Wanted a situation as manager or agent on a large farm or estate by a farmer who has been educated on the border counties of England and Scotland, and upwards of three years in this country. Apply to S. SANDS, Office of the American Farmer.

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